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CONTRIBUTION OF KARLUK AND UPPER STATION LATE RUN SOCKEYE
SALMON TO THE SITKALIDAK, KATMAI, AND ALINCHAK SECTIONS
JULY FISHERIES, 1992-1993.

By Charles O. Swanton
and
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INTRODUCTION

The Kodiak Management Area (KMA) encompasses the entire Kodiak archipelago and that portion of the Alaska Peninsula draining into Shelikof Strait from Cape Douglas to Kilokak Rocks, bordering Imuya Bay (Figure 1). The KMA is divided into 7 districts and 52 sections; district and section descriptions are reported in ADF&G (1993).

The Sitkalidak Section is located within the Eastside Kodiak District from Dangerous Cape south to Cape Kasiak. The Katmai and Alinchak Sections are located adjacently within the Mainland District from the southern entrance of Dakavak Bay south to Cape Aklek (Figure 2).

The KMA commercial salmon fishery extends annually from June through October. During June, the commercial fishery is managed for early run sockeye salmon (Prokopowich et al. 1993). In July, the fisheries within the Sitkalidak, Katmai, and Alinchak Sections are managed for pink and chum salmon. The bycatch in these fisheries includes sockeye salmon which is presently at issue due to allocation concerns.

In July 1992, the Sitkalidak Section catch was comprised of 57% sockeye and 43% pink and chum salmon combined (Table 1). During July 1993, the catch was 12.9% (124,701) sockeye and 87.1% (843,926) pink and chum salmon. The July 1992 Katmai Section catch was 80.5% (70,663) sockeye salmon and 19.5% (17,085) pink and chum salmon; for the Alinchak Section the salmon harvest was comprised of 77.3% (33,650) sockeye and 22.7% (9,879) pink and chum salmon. The July 1993 catch from the Katmai and Alinchak Sections combined was 9.7% (20,955) sockeye and 90.3% (194,927) pink and chum salmon.

The objective of this investigation is to estimate the contribution of Karluk and Upper Station late run sockeye to the catches within the Sitkalidak, Katmai, and Alinchak Sections for July, 1992 and 1993.

METHODS

Catch Estimation

The KMA salmon catch numbers by date, district, and section for 1992 and 1993 were obtained from summary reports of individual harvest receipts (fish tickets) compiled by the Alaska Department of Fish and Game (ADF&G), Commercial Fisheries Management and Development Division. The fish ticket database for both years was edited by Kodiak area salmon management biologists prior to summary reports being generated.

Age Sampling

A single scale per fish was collected from sockeye salmon catches and escapements for age determination. Scale sampling and preparation procedures were adaptations of those described by INPFC (1963) and Clutter and Whitesel (1956).

Age of individual fish was determined from scale samples. Age designation rules used were those reported by Narver (1963). Reporting of age information employed European notation: number of freshwater annuli, decimal point, number of marine annuli.

A targeted sample size of 600 scales from the commercial catch/statistical area/week was chosen based upon the assumption of a "worst case" scenario of a multinomial population (Thompson 1987). This sample size provides for simultaneously estimating at $\alpha=0.05$ that all age classes were within $\pm 4.0\%$ of the true proportions. A 240 fish escapement sample size was collected weekly at all weir sites and provides for simultaneously estimating at $\alpha=0.10$ that all age classes were within $\pm 6.5\%$ of the true proportions.

Actual numbers of sockeye scales collected from the commercial catch by section and year were:

Section	Year	Date	Sample Size
<i>Sitkalidak</i>	1992	7/16	335
		7/21-22	560
	1993	7/6-7	600
		7/13-16	1,240
		7/21-23	600
		7/29-30	600
<i>Katmai/Alinchak</i>	1992	No Sample	
	1993	7/20	600

Escapement age composition estimates were summarized for three time strata from both Karluk and Upper Station late runs to determine proportions for use in estimating stock contribution to the commercial catch. Time strata by stock were:

System	Year	Time Strata	Dates
Karluk (Late run)	1992	Early	7/22-8/1
		Median	8/9-29
		All	7/22-10/1
	1993	Early	7/22-8/1
		Median	8/9-29
		All	7/22-10/3

-Continued-

System	Year	Time Strata	Dates
Upper Station (Late run)	1992	Early	7/22-8/1
		Median	7/26-8/15
		All	7/22-9/26
	1993	Early	7/22-8/1
		Median	7/26-8/15
		All	7/22-9/26

The first strata (Early) represents the first and second weeks of the late run escapement timing. The second strata (Median) is the 1984-93 median (midpoint) escapement week for the Karluk and Upper Station late run stocks adjusted back in time one and three weeks respectively. Time adjustment assumes a one to three week migration time from the fishery to the respective weirs. The third strata (All) depicts the entire late run escapement timing.

Age Markers

For KMA sockeye, both the Karluk and Upper Station Late run stocks have unique age classes which can be employed for estimating their contributions to commercial catches (Barrett and Swanton 1992; Roche 1992). Age composition of the Karluk late run escapement is annually comprised of greater than 12% age 3. fish; late run Upper Station age 0. sockeye usually comprise about 20% of the escapement age composition (Brennan et al. 1993; Roche 1992). Age-3. and -0. proportions representing Karluk and Upper Station late runs were used to determine contributions of these stocks to the subject July fisheries.

The estimator used was:

$$\hat{C}_i = \left(\frac{\hat{P}_{j,l,m}}{\hat{E}_{i,j,k}} \right) * C_{l,m}$$

Where: C represents catch,
i system (either Karluk or Upper Station),
j age (age 3. or 0.),
P proportion of age j within catch,
E proportion of age j in stock i's escapement,
k is the timing strata (early, median, or all)
l catch area (Sitkalidak, Katmai or Alinchak),
and m the period or date.

For the calculations it was assumed: (1) Karluk and Upper Station sockeye escapements were the only stocks within the KMA and adjacent management areas (Cook Inlet and Chignik) with

age 3. and 0. sockeye, respectively; and (2) age 3. and 0. escapement proportions used (Early, Median, and All) were minimum values within each stock's escapement.

We estimated 90% confidence intervals (CI) for the Karluk and Upper Station late run proportions within the Sitkalidak and Katmai/Alinchak Sections catch from observed numbers of age 3. and 0. scales along with the total area and date specific sample size. A binomial distribution (presence/absence) was assumed for the numbers of age marker scales within the sample and population. Confidence intervals were determined using SYSTAT (SYSTAT 1990).

RESULTS

During 1992 and 1993, the sockeye escapement age composition for KMA stocks show that very few systems other than Karluk and Upper Station had appreciable numbers of age 3. or 0. fish (Table 2-3; Figure 3-4; Appendix A). The Upper Cook Inlet escapements for 1992-93 combined were < 1.0% of fish with these age classes (7,208 sockeye from a 2,291,115 fish escapement), and for Chignik < 1.0% as well (81 fish from 8,114 sockeye sampled; 1992 only). Kodiak stocks other than Karluk and Upper Station had few age 3. and 0. fish. Both Red and Frazer Lakes escapements during 1992 had 2.6% (escapements of 344,184 and 206,406 fish, respectively) and in 1993, 6.1% age 3. and 0. sockeye salmon (escapements of 286,170 and 198,412 fish; Appendix A.).

In 1992, the calculated age 3. component by time strata for the Karluk escapement ranged from 41.5-66.3% and Upper Station age 0. escapement ranged from 37.8-47.3% (Table 4). The 1993 escapement of age 3. fish ranged from 39.3% to 60.9%, while age 0. fish comprised 28.7% to 61.0% (Table 5).

1992 Sitkalidak Section Catch

In July 1992, sockeye scales were collected during two commercial fishery catch periods from the Sitkalidak Section. The 12-18 July sockeye catch was 318,096 fish. The estimated percent of Karluk and Upper Station sockeye within this catch was 2.1-2.8% with an average of 2.4% (90% CI range: 0.3-10.3%; Table 6). Corresponding estimated sockeye numbers were 6,682 to 8,966 fish; the average was 7,617 (90% CI range: 963-32,349 fish; Figure 5).

The 19-25 July sockeye catch was 44,235 fish. Karluk and Upper Station stock contributions combined were estimated to be 5.5-8.2% with an average of 6.7% (90% confidence limits range: 2.6-15.3%). Of this catch, 2,433 to 3,651 sockeye were estimated to have been of Karluk and Upper Station origin with an average of 2,939 (90% confidence interval range: 1,178-6,774 fish; Figure 5).

During the 12-25 July period, the total sockeye harvest was 362,331 fish. The estimated contribution of Karluk and Upper Station stocks ranged from 9,115-12,617 fish with an average of 10,556 (90% confidence interval range: 2,141-39,123 fish).

No scale samples were collected from either the Katmai or Alinchak Sections during July 1992.

1993 Sitkalidak Section Catch

During July 1993, there were four commercial fishing periods for which sockeye scale samples were collected. From 5-11 July, 66,093 sockeye salmon were harvested within this section. The estimated Karluk and Upper station stocks contribution ranged from 11.2-21.1%, averaging 16.1% (90% confidence interval range: 7.2-31.2%). Corresponding catch estimates were 7,392-13,937 sockeye (average 10,669) with confidence interval ranges of 4,746 to 20,587 fish (Figure 6).

During the 12-18 July fishing period, 25,245 sockeye salmon were harvested. Estimated contributions of Karluk and Upper Station sockeye to this catch averaged 17.8% and ranged from 12.2-23.5% (3,075-5,951 fish; Table 7). The 90% confidence interval estimates were 9.3-30.2% (2,341-7,624 fish; Figure 6).

The 19-25 July, sockeye catch was 24,508 fish. Karluk and Upper Station stock contributions ranged from 17.4-31.4% and averaged 24.6% (4,285-7,681 fish). The 90% confidence interval range was 12.4-43.0% (3,050- 10,527 sockeye salmon).

During the 26-31 July fishery, the commercial catch was 8,855 sockeye. Estimates of Karluk and Upper Station contributions combined, averaged 46.0% and ranged from 31.8-60.2% (2,818-5,336 fish). The 90% CI range was 25.4-74.3% or 2,244 to 6,578 sockeye salmon.

In July, the overall commercial sockeye catch was 124,701. The contribution to this catch from the Karluk and Upper Station late run stocks averaged 20.3% ranging from 14.1-26.4% or 25,274 fish with a range of 17,570-32,905. The confidence interval estimates ranged from 9.7-36.3% (12,381-45,316 sockeye).

1993 Katmai/Alinchak Sections Catch

The 19-25 July, total sockeye catch was 1,674. The estimated contribution of the Karluk and Upper Station stocks combined averaged 13.0%, and range from 8.8-17.3% or 149-288 fish (90% CI range: 5.6-26.0%; 93-434 fish; Table 7; Figure 7).

DISCUSSION

The method used for estimating Karluk and Upper Station late run sockeye contributions to the commercial catch using age 3. and 0. markers appears reasonable owing to the near absence of these age classes in other stocks. However for 1993, both Red and Frazer Lakes sockeye escapements had a slight (~6%) age 3. and 0. component combined, therefore the 1993 Karluk and Upper Station stock contributions are overestimates. If this bias was accounted for, Karluk

and Upper Station estimates for 1993 would be reduced with the balance assigned to Red and Frazer Lakes stocks.

In 1992-93, within the Sitkalidak Section, Karluk and Upper Station sockeye salmon were a minor component (5.5-20.3%) of the overall July catch. While sockeye catch sampling during 1992 was insufficient to establish a trend, during 1993 both the Karluk and Upper Station stocks contributions to the catch for July appeared to increase over time. This would be expected based upon timing of these late run stocks.

The Katmai and Alinchak Sections were not sampled during 1992, and only a single sample representing the catch during 19-25 July, from both areas combined, was obtained in 1993. The estimated contribution of the Karluk and Upper Station stocks to this catch constituted a minor percentage (10.9-26.0%) of a 1,674 fish catch.

Results herein refer strictly to the contributions of Karluk and Upper Station late run sockeye. The balance of the unassigned catch are likely a combination of local and non-local sockeye stocks which do not exhibit unique age classes and are therefore unidentifiable using this approach.

LITERATURE CITED

- ADF&G (Alaska Department of Fish and Game), 1993. 1992-1994 Bristol Bay and Westward Alaska commercial fishing regulations, salmon and miscellaneous finfish. Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau.
- Barrett, B.M. and C.O. Swanton. 1992. Estimation of the Major sockeye salmon stocks contributing to the North Shelikof Strait fishery of July 6-25, 1988-1992. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K92-43, Kodiak.
- Brennan, K., D.L. Prokopowich, and D. Gretschi. 1993. Kodiak Management Area commercial salmon annual management report, 1992. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K93-28, Kodiak.
- Clutter, R., and L. Whitesel. 1956. Collection and interpretation of sockeye salmon scales. International Pacific Salmon Fisheries Commission Bulletin 9, Vancouver, British Columbia.
- INPFC (International North Pacific Fisheries Commission). 1963. Annual Report, 1961, Vancouver, British Columbia.
- Narver, D.W. 1963. Identification of adult red salmon groups by lacustrine scale measurement, time of entry, and spawning characteristics. Masters thesis, University of Washington, Seattle. 96pp.
- Prokopowich, D.L., K. Brennan, and D. Gretschi. 1993. Kodiak area commercial salmon fishery harvest strategy, 1993. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K93-21, Kodiak.
- Roche, P.A. 1992. The estimated incidence of Upper Station Late run sockeye salmon in the Alitak Bay District, Inner Akalura Section Fishery of 20 August, 1992. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K92-34, Kodiak.
- SYSTAT, Inc. 1990. SYSTAT Version 5.0 Systat, Inc., Evanston Illinois.
- Thompson, S.K. 1987. Sample size for estimating multinomial proportions. The American Statistician 41(1):42-46.
- Vining, I. and B. M. Barrett. 1994. The use of average weight to estimate the amount of interception of non local sockeye within the Kodiak Management Area. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K94-5, Kodiak.

Table 1. Commercial catch of sockeye, pink, and chum salmon within the Sitkalidak, Katmai, and Alinchak Sections during July, 1992-1993.

Section	Year	No. Permits	Fishing Time ^a (days)	Commercial Catch.		
				Sockeye	Pink	Chum
Sitkalidak						
	1992	145	20	436,329	199,661	129,448
	1993	108	23	124,701	829,812	14,114
Katmai	1992	44	10	70,663	9,710	7,375
Alinchak	1992	20	6	33,650	6,503	3,376
Katmai and Alinchak Combined						
	1993	26	14	20,955	188,375	6,552

^a Fishing time (days) is nonconsecutive.

Table 2. Estimated age composition of Kodiak Management Area sockeye salmon escapement by system and Sitkalidak Section catch, 1992.

Escapement or Catch District System or Area			Sample Size	Ages													Total	
				0.1	0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	2.3	3.2	3.3	3.4		other a/
KMA Escapement																		
Afognak																		
Afognak Lake	1,025	Percent	0.0	0.0	21.2	0.0	22.2	9.9	29.9	3.8	0.1	12.3	0.0	0.0	0.0	0.6	100.0	
		Numbers	0	0	16,362	0	17,115	7,681	23,096	2,938	90	9,526	0	0	0	455	77,260	
NW Kodiak																		
Uganik Lake	625	Percent	0.0	0.0	1.8	0.0	8.4	0.3	22.7	29.0	0.0	35.7	0.0	0.1	0.0	2.0	100.0	
		Numbers	0	16	1,370	2	6,390	237	17,190	22,017	0	27,086	20	51	0	1,521	75,894	
SW Kodiak																		
Karluk Lake																		
early run	1,188	Percent	0.0	0.0	0.6	0.0	1.6	2.5	1.6	22.0	7.7	24.8	26.6	12.0	0.0	0.7	100.0	
		Numbers	0	0	1,378	0	3,498	5,353	3,453	47,728	16,750	53,779	57,742	25,987	0	1,482	217,152	
late run	1,558	Percent	0.0	0.3	0.1	0.2	0.4	0.2	0.1	21.4	0.2	10.9	61.3	4.8	0.0	0.0	100.0	
		Numbers	0	2,067	631	1,411	2,688	1,192	316	131,705	1,058	66,761	376,592	29,578	0	262	614,262	
Red Lake	1,471	Percent	0.0	0.0	0.1	0.3	10.9	0.5	13.6	44.5	0.4	27.5	0.7	1.1	0.1	0.2	100.0	
		Numbers	0	0	292	1,055	37,537	1,733	46,732	153,303	1,491	94,489	2,574	3,906	414	648	344,184	
Alitak Bay																		
Frazer Lake	1,412	Percent	0.0	0.0	7.8	0.0	4.7	3.8	0.9	42.0	0.0	37.8	2.0	0.6	0.0	0.4	100.0	
		Numbers	0	0	16,189	0	9,739	7,793	1,804	86,676	0	78,005	4,219	1,247	0	738	206,406	
Akalura Lake																		
early run	418	Percent	0.0	0.0	0.5	0.0	13.5	1.4	51.9	21.9	0.0	10.0	0.0	0.0	0.0	0.7	99.8	
		Numbers	0	0	12	0	335	36	1,289	543	0	248	0	0	0	17	2,484	
late run	553	Percent	0.0	0.0	0.0	0.0	0.9	0.0	2.4	82.5	0.0	13.4	0.7	0.0	0.0	0.0	100.0	
		Numbers	0	0	0	0	574	27	1,485	50,153	0	8,133	441	0	0	0	60,812	
Upper Station																		
early run	1,248	Percent	0.0	1.0	2.1	0.2	0.2	4.5	1.7	69.9	0.1	18.9	0.8	0.1	0.0	0.5	100.0	
		Numbers	0	197	404	31	36	852	318	13,328	27	3,614	149	28	0	90	19,076	
late run	894	Percent	0.7	40.0	0.6	6.6	18.1	0.5	4.0	24.9	0.0	4.2	0.4	0.0	0.0	0.0	100.0	
		Numbers	1,432	79,714	1,125	13,097	36,089	1,000	8,036	49,478	0	8,351	744	0	0	0	199,067	
NE Kodiak																		
Buskin Lake	258	Percent	0.0	0.0	0.1	0.0	4.8	2.5	13.7	12.1	0.0	62.9	0.3	0.0	0.0	3.6	100.0	
		Numbers	0	0	13	0	471	245	1,344	1,180	4	6,154	26	0	0	349	9,782	
Eastside Kodiak Catch																		
Sitkalidak	690	Percent	0.0	0.1	0.0	0.7	3.2	0.0	78.6	6.2	0.0	10.0	0.1	0.3	0.0	0.8	100.0	
		Numbers	0	246	0	2,943	14,169	0	342,956	26,937	0	43,739	369	1,411	0	3,560	436,329	

^a "Other" includes age-1.4, 2.4 and 4.2.

Table 3. Estimated age composition Kodiak Management Area sockeye salmon escapement by system, and Sitkalidak, Katmai, and Alinchak catch, 1993.

Escapement or Catch			Ages														Total
District System or Area	Sample Size		0.1	0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	2.3	3.2	3.3	3.4	other ^a	
KMA Escapement																	
Afognak																	
Afognak Lake	852	Percent	0.0	0.0	16.6	0.0	10.7	17.2	30.3	12.3	0.1	12.5	0.2	0.0	0.0	0.0	100.0
		Numbers	0	0	11,837	0	7,634	12,318	21,677	8,818	53	8,965	163	0	0	0	71,460
Thorsheim	124	Percent	0.0	0.0	0.8	0.0	4.0	1.6	5.6	36.3	0.0	46.8	4.0	0.8	0.0	0.0	100.0
		Numbers	0	0	1	0	5	2	7	45	0	58	5	1	0	0	124 ^b
NW Kodiak																	
Uganik Lake	397	Percent	0.0	0.3	0.0	0.0	16.4	0.0	26.4	16.6	0.0	27.2	0.5	0.0	0.0	0.0	100.0
		Numbers	0	1	0	0	65	0	105	66	0	108	2	0	0	0	397 ^c
SW Kodiak																	
Karluk Lake																	
early run	1,593	Percent	0.0	0.0	0.0	0.0	1.5	0.8	1.8	15.4	1.5	8.0	59.4	10.9	0.0	0.6	100.0
		Numbers	0	0	111	0	4,046	2,211	4,625	40,173	3,984	20,987	155,021	28,417	38	1,556	261,167
late run	1,659	Percent	0.0	0.6	0.2	0.6	0.9	3.1	0.5	29.4	1.8	3.6	49.6	9.6	0.0	0.1	100.0
		Numbers	0	2,213	942	2,291	3,642	12,236	1,927	116,606	7,036	14,415	196,418	38,015	0	547	396,288
Red Lake	2,411	Percent	0.0	0.0	0.1	0.5	3.5	4.3	7.7	25.2	0.1	51.2	5.5	1.7	0.0	0.2	100.0
		Numbers	0	0	411	1,485	9,944	12,258	21,903	72,241	353	146,510	15,822	4,726	0	521	286,170
Alitak Bay																	
Frazer Lake	1,908	Percent	0.0	0.0	0.6	0.0	41.3	6.5	3.8	26.5	0.1	20.1	0.0	1.1	0.0	0.0	100.0
		Numbers	0	0	1,096	52	81,983	12,847	7,524	52,647	133	39,956	26	2,146	0	0	198,412
Akalura Lake																	
early run	99	Percent	0.0	0.0		0.0	5.1	0.0	51.5	17.2	0.0	24.2	1.9	0.0	0.0	0.0	99.9
		Numbers	0	0		0	92	0	930	311	0	438	35	0	0	0	1,807
late run	661	Percent	0.0	0.0	0.1	0.0	18.2	0.3	4.3	45.5	0.1	31.4	0.1	0.0	0.0	0.0	100.0
		Numbers	0	0	22	0	5,251	85	1,252	13,145	22	9,083	22	0	0	0	28,885
Upper Station																	
early run	1,426	Percent	0.0	1.5	1.7	5.8	8.7	18.1	1.6	35.6	0.6	25.2	0.8	0.4	0.0	0.0	100.0
		Numbers	0	521	578	2,026	3,045	6,313	559	12,399	210	8,783	271	142	0	0	34,852
late run	1,013	Percent	3.6	17.9	2.1	7.2	18.1	6.4	13.4	20.9	0.1	4.8	5.2	0.4	0.0	0.1	100.0
		Numbers	6,753	33,657	3,862	13,437	33,913	11,982	25,059	39,223	177	8,920	9,708	664	0	177	187,529
NE Kodiak																	
Saltery Lake	513	Percent	0.0	0.0	0.0	0.2	0.8	0.2	10.5	23.0	0.0	64.7	0.0	0.6	0.0	0.0	100.0
		Numbers	0	0	0	151	602	151	8,125	17,754	0	49,953	0	452	0	0	77,186
Buskin Lake	408	Percent	0.0	0.0	0.1	0.0	9.1	1.8	2.4	20.4	0.0	62.7	1.7	0.4	0.0	1.4	100.0
		Numbers	0	0	11	0	868	167	228	1,939	0	5,974	166	40	0	134	9,526
Catch																	
Eastside Kodiak																	
Sitkalidak	2,641	Percent	0.0	0.8	0.0	4.0	11.8	0.1	18.8	18.0	0.0	41.9	1.9	1.9	0.0	0.7	100.0
July		Numbers	0	1,014	17	5,049	14,718	142	23,440	22,455	0	52,243	2,354	2,349	0	921	124,701
Mainland																	
Katmai/Alinchak	522	Percent	0.0	0.4	0.0	3.3	5.6	0.4	24.5	11.1	0.0	49.6	1.2	0.8	0.0	3.3	100.0
July		Numbers	0	80	0	683	1,164	80	5,137	2,328	0	10,397	241	160	0	682	20,955

^a Other includes ages-1.4, -2.4, -4.2, and -4.3.

^b Terminal catch sample represents escapement.

^c Represents sample which includes reabsorbed fish not shown in composition summary.

Table 4. Karluk and Upper Station late run sockeye age 3. and 0. components by time strata, 1992.

System	Escapement Timing		Sample Size	Age Marker (Percent)	
	Strata	Dates		Age 3.	Age 0.
Karluk (Age 3.)					
	Early	(7/22-8/1)	349	41.5	
	Median	(8/9-8/29)	525	57.5	
	All	(7/22-10/3)	1558	66.3	
Upper Station (Age 0.)					
	Early	(7/22-8/1)	262		45.0
	Median	(7/26-8/15)	558		37.8
	All	(7/22-9/26)	894		47.3

Table 5. Karluk and Upper Station late run sockeye age 3. and 0. components by time strata, 1993.

System	Escapement Timing		Sample Size	Age Marker (Percent)	
	Strata	Date		Age 3.	Age 0.
Karluk (Age 3.)					
	Early	(7/22-8/1)	206	39.3	
	Median	(8/9-8/29)	543	44.0	
	All	(7/22-10/3)	1659	60.9	
Upper Station (Age 0.)					
	Early	(7/22-8/1)	210		61.0
	Median	(7/26-8/15)	615		41.0
	All	(7/22-9/26)	1013		28.7

Table 6. Estimated contribution of the Karluk and Upper Station sockeye stocks to the Sitkalidak Section fishery during 12-25 July, 1992.

Catch			Stock	Timing Strata	Stock Contribution					
					Percent			Numbers		
					Point Est.	90%CI		Point Est.	90%CI	
						Lower	Upper		Lower	Upper
Section	Total ^a	Date								
Sitkalidak	318,096	7/12-18								
			Karluk							
			Early	0.9	0.0	4.2	2,804	142	13,245	
			Median	0.6	0.0	3.0	2,025	103	9,566	
			All	0.6	0.0	2.6	1,757	89	8,300	
			Avg.	0.7	0.0	3.3	2,196	111	10,370	
			Upper Station							
			Early	1.6	0.3	5.1	5,174	918	16,174	
			Median	1.9	0.3	6.1	6,162	1,093	19,104	
			All	1.5	0.3	4.8	4,925	874	15,395	
			Avg.	1.7	0.3	5.3	5,421	962	16,891	
Sitkalidak	44,235	7/19-25								
			Karluk							
			Early	6.3	3.6	10.4	2,809	1,581	4,610	
			Median	4.6	2.6	7.5	2,028	1,142	3,330	
			All	4.0	2.2	6.5	1,760	991	2,889	
			Avg.	5.0	2.8	8.2	2,199	1,238	3,610	
			Upper Station							
			Early	1.6	0.4	4.1	707	196	1,817	
			Median	1.9	0.5	4.9	842	234	2,164	
			All	1.5	0.4	3.9	673	187	1,730	
			Avg.	1.7	0.5	4.3	740	206	1,904	

^a Number of sockeye salmon.

Table 7. Estimated contribution of the Karluk and Upper Station sockeye stocks to the Sitkalidak, Katmai, and Alinchak Sections catch, 1993.

Stock Contribution										
Catch				Timing Strata	Percent					
					Point Est.	90%CI		Point Est.	90%CI	
						Lower	Upper		Lower	Upper
Section	Total ^a	Date	Stock							
Sitkalidak	66,093	7/5-11	Karluk	Early	7.1	4.3	11.1	4,716	2,866	7,312
				Median	6.4	3.9	9.9	4,213	2,560	6,532
				All	4.6	2.8	7.1	3,046	1,851	4,722
				Avg.	6.0	3.7	9.4	3,992	2,426	6,189
			Upper Station	Early	6.6	4.4	9.5	4,346	2,895	6,257
				Median	9.8	6.5	14.1	6,465	4,307	9,307
				All	14.0	9.3	20.1	9,221	6,143	13,275
				Avg.	10.1	6.7	14.5	6,677	4,448	9,613
	25,245	7/12-18	Karluk	Early	6.1	4.3	8.5	1,549	1,085	2,138
				Median	5.5	3.8	7.6	1,383	969	1,910
				All	4.0	2.8	5.5	1,000	701	1,381
				Avg.	5.2	3.6	7.2	1,311	918	1,810
			Upper Station	Early	8.2	6.5	10.2	2,075	1,640	2,586
				Median	12.2	9.7	15.2	3,086	2,443	3,846
				All	17.4	13.8	21.7	4,402	3,484	5,486
				Avg.	12.6	10.0	15.7	3,188	2,522	3,973
	24,508	7/19-25	Karluk	Early	15.6	11.3	20.8	3,811	2,780	5,092
				Median	13.9	10.1	18.6	3,405	2,483	4,549
				All	10.0	7.3	13.4	2,461	1,795	3,289
				Avg.	13.2	9.6	17.6	3,226	2,353	4,310
			Upper Station	Early	7.4	5.1	10.5	1,824	1,255	2,561
				Median	11.1	7.6	15.2	2,713	1,866	3,810
				All	15.8	10.9	22.2	3,870	2,662	5,435
				Avg.	11.4	7.9	16.0	2,803	2,210	3,935
8,855	7/26-31	Karluk	Early	19.6	15.1	25.0	1,739	1,338	2,216	
			Median	17.5	13.5	22.4	1,553	1,195	1,980	
			All	12.7	9.8	16.1	1,123	864	1,431	
			Avg.	16.6	12.8	21.2	1,472	1,132	1,876	
		Upper Station	Early	19.1	15.6	23.2	1,695	1,380	2,056	
			Median	28.5	21.6	34.5	2,522	1,911	3,058	
			All	40.6	15.6	49.3	3,597	1,382	4,362	
			Avg.	29.4	17.6	35.7	2,605	1,558	3,158	
Katmai Alinchak (Combined)	1,674	7/19-25	Karluk	Early	4.7	2.5	7.8	77	42	130
				Median	4.1	2.2	6.9	69	37	116
				All	2.9	1.6	5.0	49	27	84
				Avg.	3.9	2.1	6.6	65	35	110
			Upper Station	Early	5.9	4.0	8.6	100	66	143
				Median	8.8	5.9	12.7	148	99	213
				All	12.6	8.4	18.2	211	141	304
				Avg.	9.1	6.1	13.2	153	102	220

^a Number of sockeye salmon.

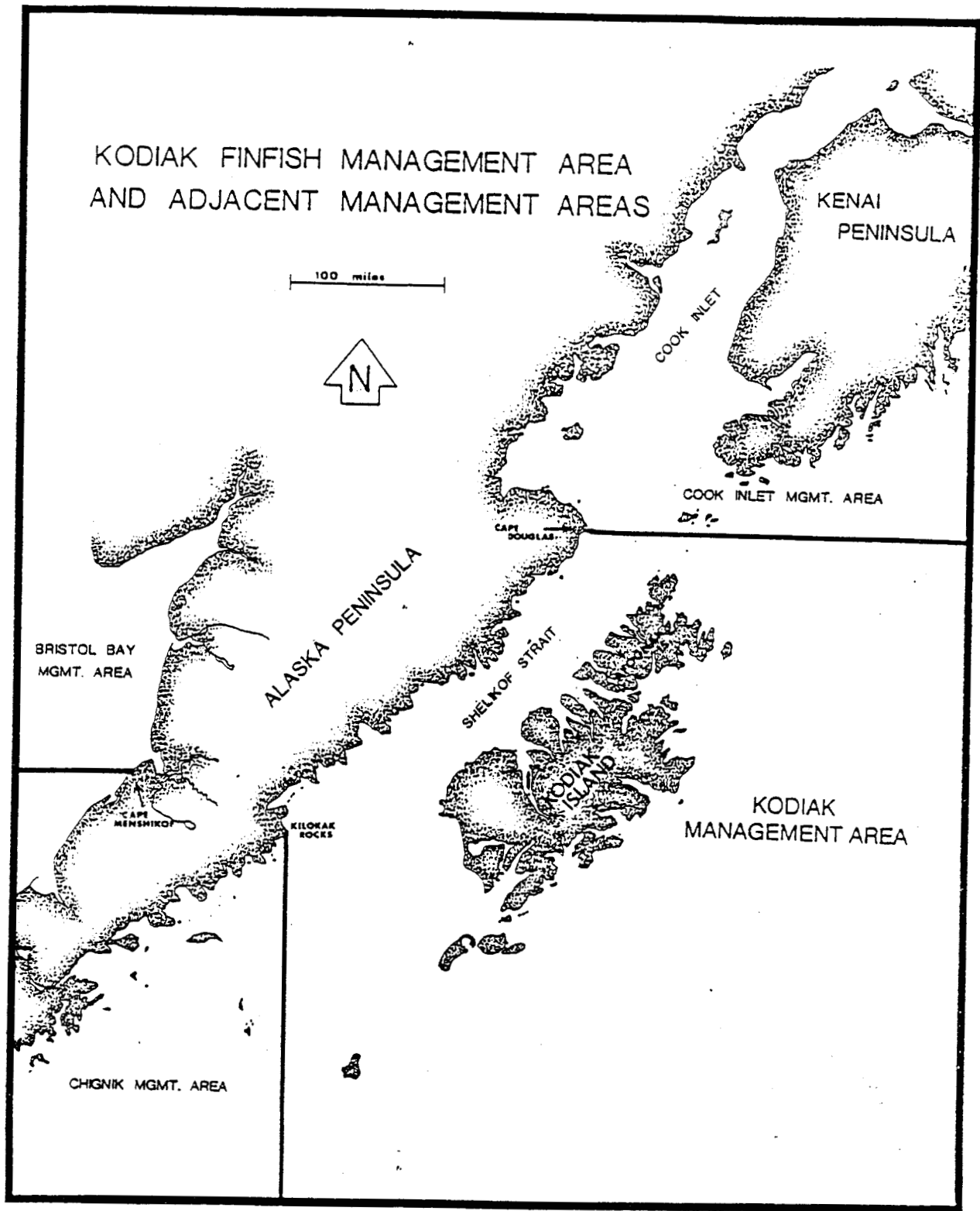


Figure 1. Map of Kodiak and adjacent management areas.

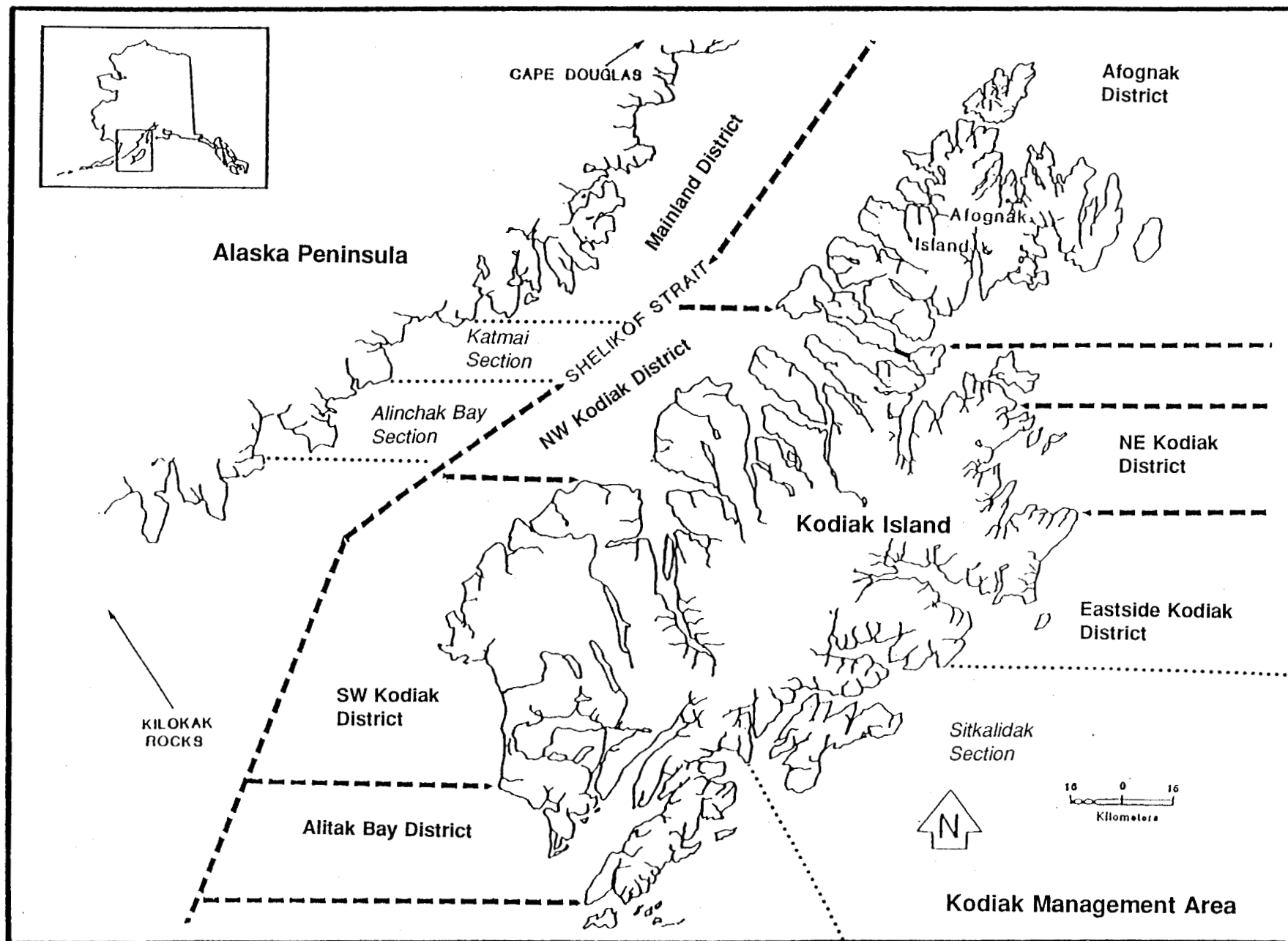


Figure 2. Map of Kodiak Management Area fishing districts showing the location of Sitkalidak, Katmai, and Alinchak Sections.

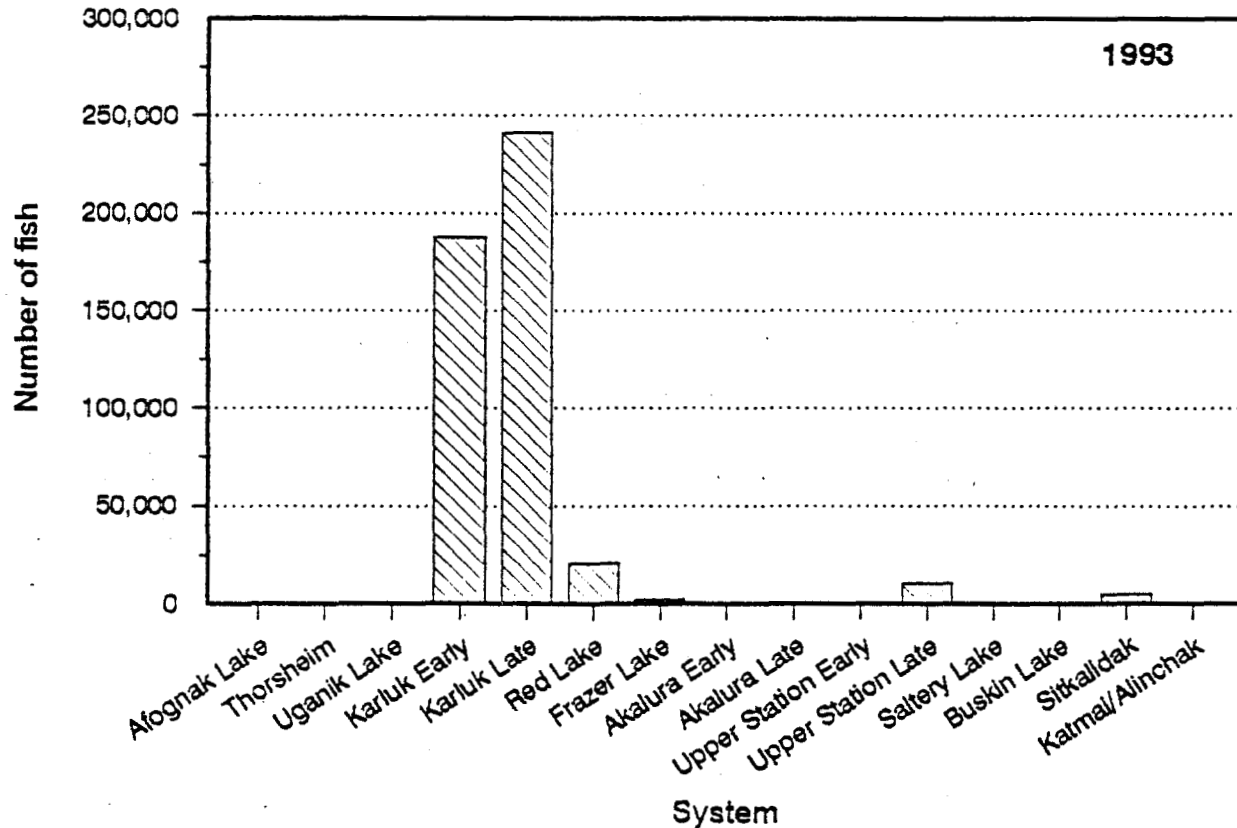
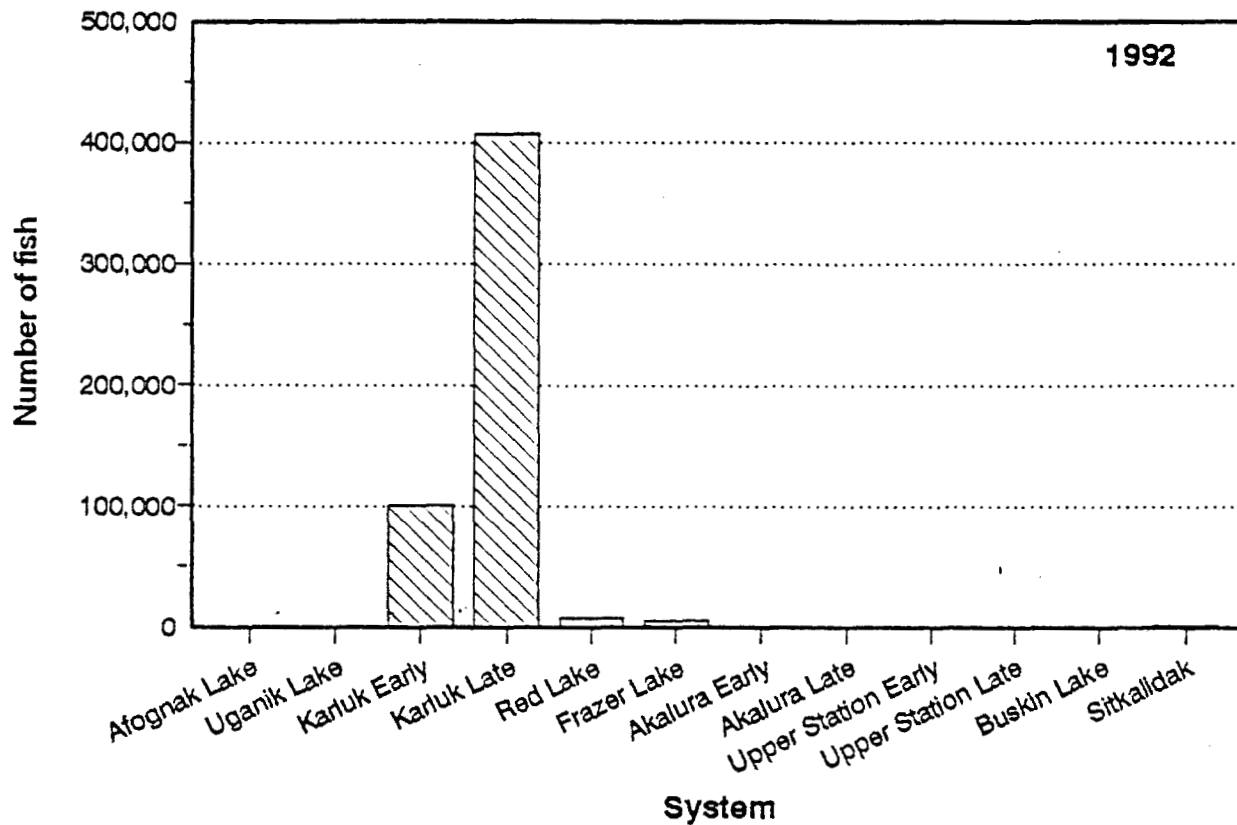


Figure 3. Number of age-3 sockeye salmon by system and specific catch areas, Kodiak Management Area, 1992-1993.

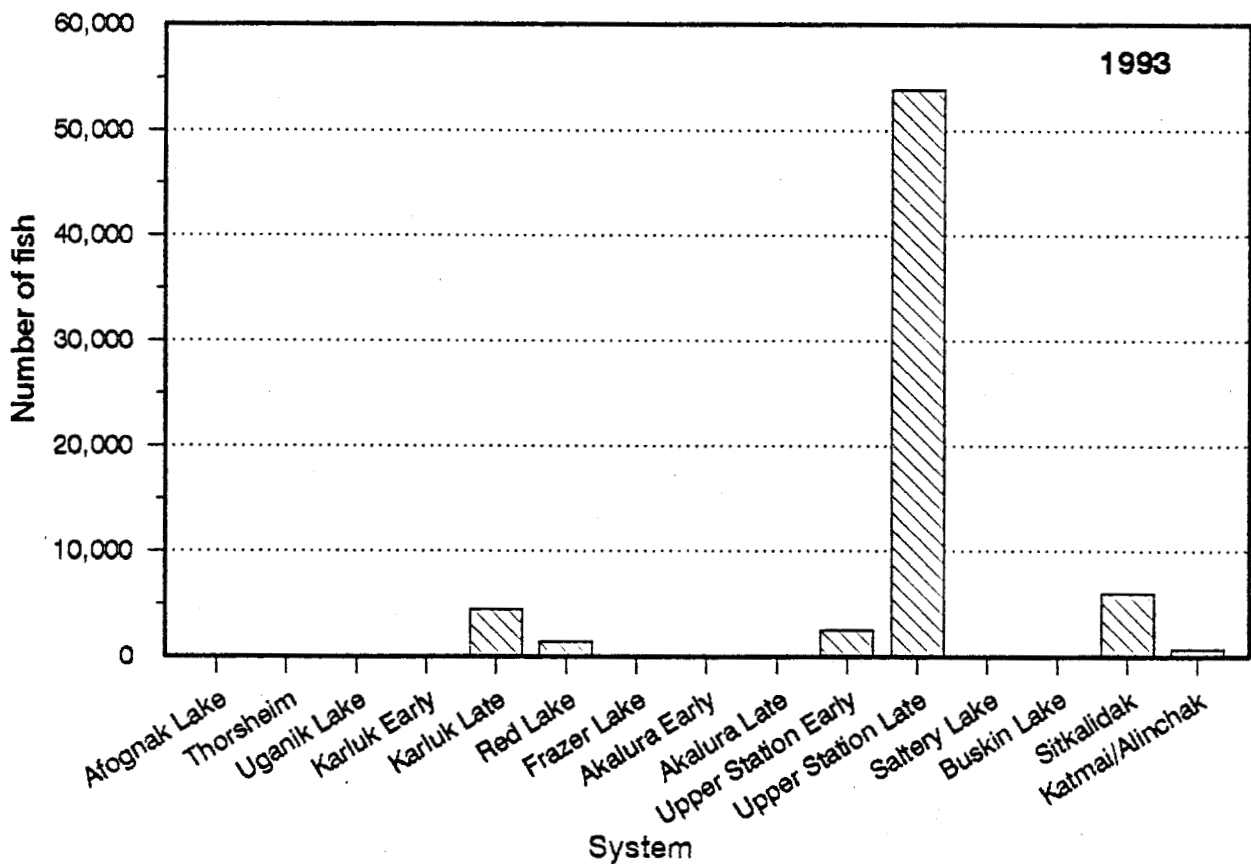
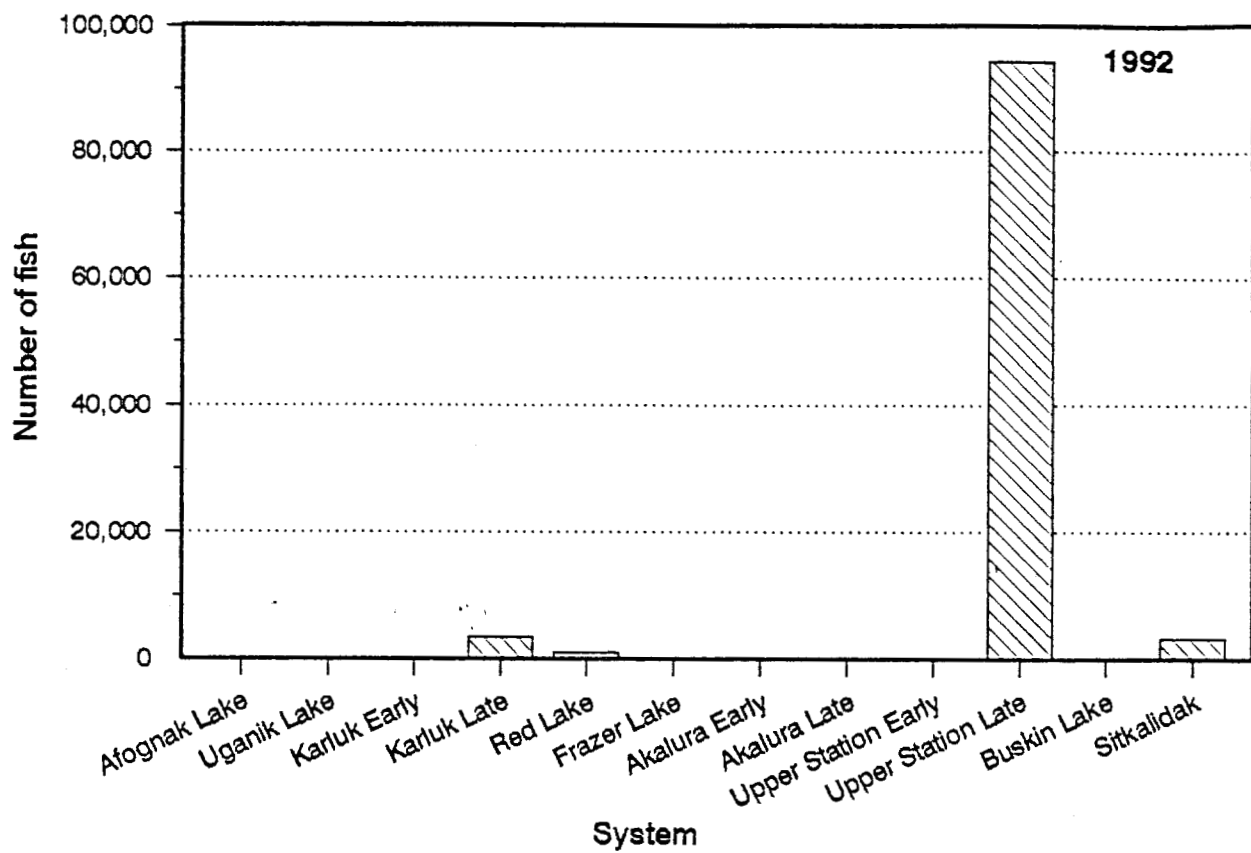
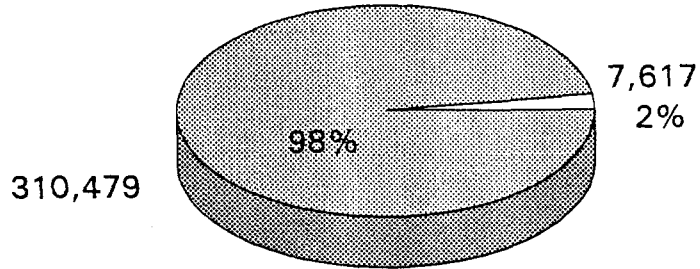


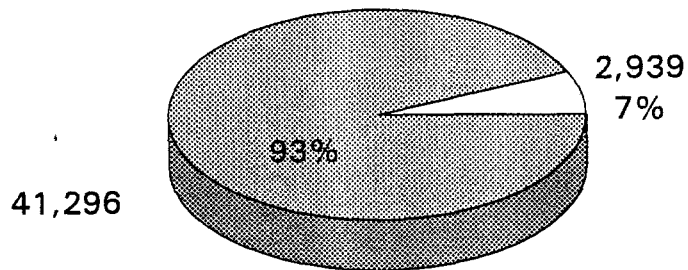
Figure 4. Number of age 0. sockeye salmon by system and specific catch areas, Kodiak Management Area, 1992-1993.

Sitkalidak Section 1992



12-18 July

Total = 318,096



19-25 July

Total = 44,235

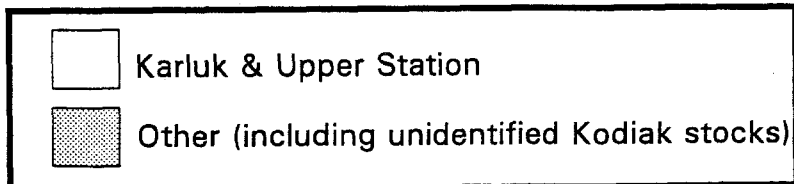


Figure 5. Estimated contribution of Karluk and Upper Station sockeye stocks to the Sitkalidak Section catch, July 1992.

Sitkalidak Section 1993

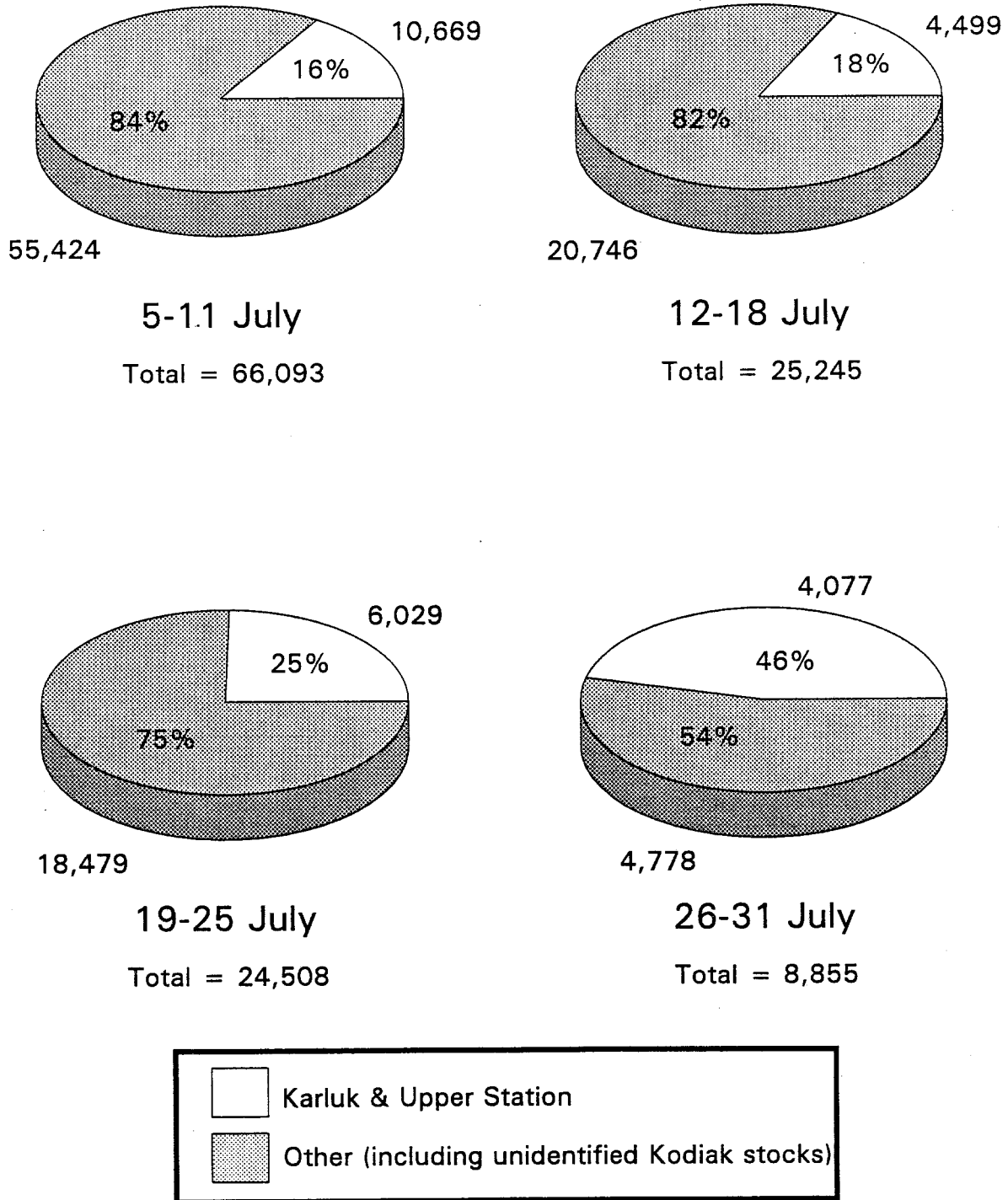
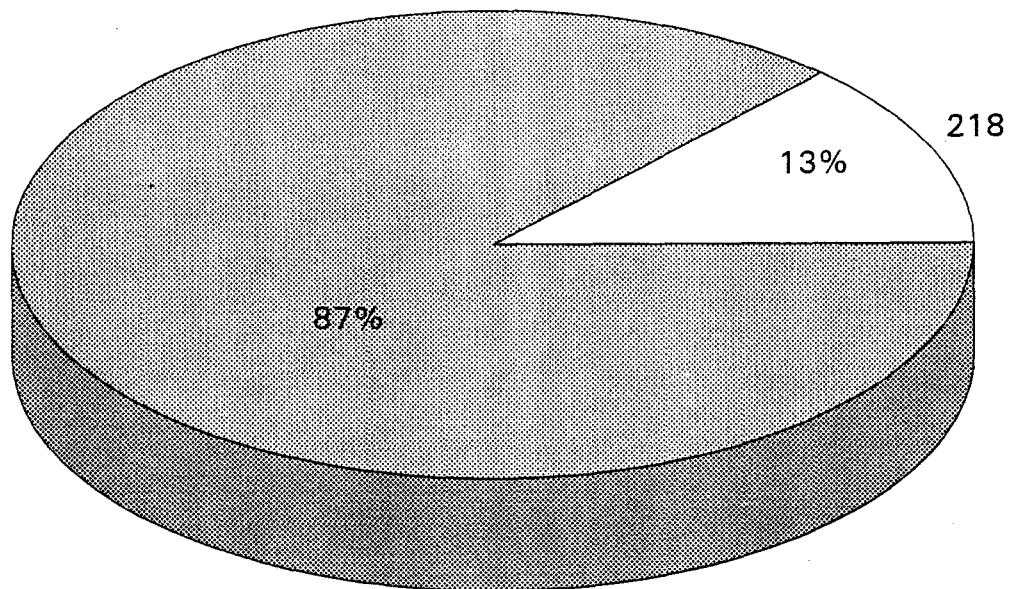


Figure 6. Estimated contribution of Karluk and Upper Station sockeye stocks to the Sitkalidak Section catch, July 1993.

Katmai and Alinchak Sections 1993



19-25 July

Total = 1,674

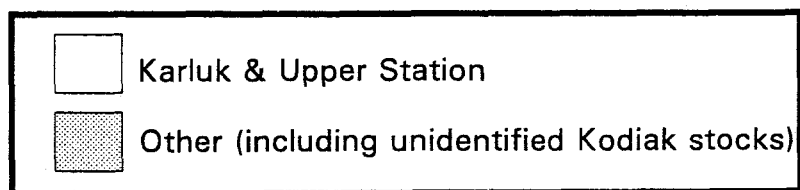


Figure 7. Estimated contribution of Karluk and Upper Station sockeye stocks to the Katmai and Alinchak Sections catch, July 1992.

APPENDIX

Appendix A.1. Estimated age composition of Afognak Lake sockeye salmon escapement by week, 1992^a.

Week	Sample Size		Ages								Total
			1.1	1.2	2.1	1.3	2.2	3.1	1.4	2.3	
22 (5/24-5/30)	0	Percent	2.4	30.8	2.4	42.2	4.5	0.1	0.6	17.0	100.0
		Numbers	16	206	16	282	30	1	4	114	669
23 (5/31-6/06)	0	Percent	2.4	30.8	2.4	42.1	4.5	0.2	0.6	17.0	100.0
		Numbers	139	1,813	139	2,476	267	12	35	1,000	5,882
24 (6/07-6/13)	0	Percent	2.4	30.8	2.4	42.1	4.5	0.2	0.6	17.0	100.0
		Numbers	336	4,365	336	5,960	644	28	84	2,406	14,159
25 (6/14-6/20)	506	Percent	4.3	29.9	3.2	40.8	4.5	0.2	0.6	16.5	100.0
		Numbers	447	3,077	326	4,197	459	19	60	1,697	10,284
26 (6/21-6/27)	0	Percent	14.3	25.3	7.2	34.4	4.1	0.1	0.5	14.0	100.0
		Numbers	1,663	2,954	835	4,007	475	17	63	1,637	11,656
27 (6/28-7/04)	0	Percent	25.8	20.0	11.8	26.9	3.6	0.1	0.5	11.2	100.0
		Numbers	1,944	1,509	889	2,027	273	7	37	843	7,536
28 (7/05-7/11)	0	Percent	37.6	14.6	16.5	19.3	3.2	0.0	0.4	8.3	100.0
		Numbers	4,595	1,785	2,023	2,356	386	6	53	1,011	12,232
29 (7/12-7/18)	519	Percent	47.6	10.0	20.6	12.8	2.8	0.0	0.4	5.8	100.0
		Numbers	2,201	461	952	591	128	0	18	268	4,627
30 (7/19-7/25)	0	Percent	49.1	9.3	21.2	11.8	2.7	0.0	0.4	5.4	100.0
		Numbers	2,013	379	868	482	111	0	16	221	4,097
31 (7/26-8/01)	0	Percent	49.1	9.3	21.2	11.7	2.7	0.0	0.4	5.4	100.0
		Numbers	1,344	253	580	321	74	0	11	148	2,735
32 (8/02-8/08)	0	Percent	49.2	9.2	21.2	11.7	2.7	0.0	0.4	5.4	100.1
		Numbers	959	180	414	229	53	0	8	105	1,951
33 (8/09-8/15)	0	Percent	49.2	9.3	21.2	11.7	2.6	0.0	0.4	5.3	100.0
		Numbers	223	42	96	53	12	0	2	24	453
34 (8/16-8/22)	0	Percent	49.2	9.1	21.2	11.8	2.7	0.0	0.3	5.4	100.0
		Numbers	146	27	63	35	8	0	1	16	297
35 (8/23-8/29)	0	Percent	49.1	9.5	21.6	12.1	2.6	0.0	0.0	5.2	100.0
		Numbers	57	11	25	14	3	0	0	6	116
36 (8/30-9/05)	0	Percent	50.0	9.3	20.4	11.1	1.9	0.0	0.0	5.6	98.1
		Numbers	27	5	11	6	1	0	0	3	54

-Continued-

Appendix A.1. (page 2 of 2)

Week	Sample Size		Ages								Total	
			1.1	1.2	2.1	1.3	2.2	3.1	1.4	2.3		2.4
37 (9/06-9/12)	0	Percent Numbers	50.0 3	16.7 1	16.7 1	16.7 1	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	100.0 6
38 (9/13-9/19)	0	Percent Numbers	49.2 249	9.3 47	21.1 107	11.7 59	2.8 14	0.0 0	0.4 2	5.3 27	0.2 1	100.0 506
Total	1,025	Percent Numbers	21.2 16,362	22.2 17,115	9.9 7,681	29.9 23,096	3.8 2,938	0.1 90	0.5 394	12.3 9,526	0.1 61	100.0 77,260

- ^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.2. Estimated age composition of Uganik Lake sockeye salmon escapement by week, 1992^a.

Week	Sample Size		Ages											Total	
			0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4		3.3
23 (5/31-6/06)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	11.4 4	17.1 6	0.0 0	65.7 23	0.0 0	2.9 1	0.0 0	97.1 35
24 (6/07-6/13)	73	Percent Numbers	0.0 0	0.0 0	0.0 0	1.4 19	0.0 0	12.4 169	16.5 225	0.0 0	67.2 918	0.0 0	2.7 37	0.0 0	100.1 1,367
25 (6/14-6/20)	285	Percent Numbers	0.0 0	0.0 0	0.0 0	3.7 40	0.0 0	16.2 175	16.3 176	0.6 7	62.7 679	0.0 0	0.3 3	0.3 3	100.0 1,083
26 (6/21-6/27)	0	Percent Numbers	0.0 0	0.7 52	0.0 0	5.7 399	0.0 0	19.1 1,340	21.1 1,477	1.2 87	51.9 3,636	0.0 0	0.0 0	0.3 18	100.0 7,008
27 (6/28-7/04)	39	Percent Numbers	0.0 0	2.2 1,311	0.0 0	9.3 5,573	0.0 0	24.3 14,515	30.9 18,418	2.3 1,371	30.9 18,436	0.0 0	0.0 0	0.1 30	100.0 59,654
28 (7/05-7/11)	72	Percent Numbers	0.7 1	3.5 5	0.7 1	15.6 22	2.1 3	13.5 19	31.2 44	0.7 1	28.4 40	2.8 4	0.0 0	0.0 0	99.3 141
29 (7/12-7/18)	136	Percent Numbers	0.7 8	0.2 2	0.1 1	15.5 172	0.5 6	13.8 153	25.8 286	0.6 7	41.9 464	0.8 9	0.0 0	0.0 0	100.1 1,107
30 (7/19-7/25)	20	Percent Numbers	0.3 7	0.0 0	0.0 0	6.2 165	3.2 85	14.6 390	25.3 674	0.3 7	50.0 1,333	0.3 7	0.0 0	0.0 0	100.0 2,668
31 (7/26-8/01)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	5.0 61	15.0 182	25.0 303	0.0 0	55.0 666	0.0 0	0.0 0	0.0 0	100.2 1,210
32 (8/02-8/08)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	5.0 27	15.0 80	25.0 134	0.0 0	55.0 294	0.0 0	0.0 0	0.0 0	100.0 535
33 (8/09-8/15)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	5.0 22	14.9 66	25.1 111	0.0 0	55.0 243	0.0 0	0.0 0	0.0 0	100.0 442
34 (8/16-8/22)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	5.1 16	14.9 47	25.1 79	0.0 0	54.9 173	0.0 0	0.0 0	0.0 0	100.0 315
35 (8/23-8/29)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	5.2 7	14.9 20	25.4 34	0.0 0	55.2 74	0.0 0	0.0 0	0.0 0	100.7 134
36 (8/30-9/05)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	5.3 3	15.8 9	24.6 14	0.0 0	54.4 31	0.0 0	0.0 0	0.0 0	100.0 57

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Week	Sample Size		Ages											Total	
			0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4		3.3
37 (9/06-9/12)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	4.9 2	14.6 6	24.4 10	0.0 0	56.1 23	0.0 0	0.0 0	0.0 0	100.0 41
38 (9/13-9/19)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	3.8 1	15.4 4	26.9 7	0.0 0	53.8 14	0.0 0	0.0 0	0.0 0	100.0 26
39 (9/20-9/26)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	5.9 2	14.7 5	26.5 9	0.0 0	55.9 19	0.0 0	0.0 0	0.0 0	102.9 34
40 (9/27-10/03)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	6.5 2	16.1 5	25.8 8	0.0 0	54.8 17	0.0 0	0.0 0	0.0 0	103.2 31
41 (10/04-10/10)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	16.7 1	33.3 2	0.0 0	50.0 3	0.0 0	0.0 0	0.0 0	100.0 6
Total	625	Percent Numbers	0.0 16	1.8 1,370	0.0 2	8.4 6,390	0.3 237	22.7 17,190	29.0 22,017	2.0 1,480	35.7 27,086	0.0 20	0.1 41	0.1 51	100.0 75,894

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.3. Estimated age composition of Karluk Lake early run sockeye salmon escapement by week, through July 21, 1992^a.

Week	Sample Size		Ages											Total	
			1.1	1.2	2.1	1.3	2.2	3.1	1.4	2.3	3.2	2.4	3.3		4.2
22 (5/24-5/30)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	18.2 4	0.0 0	0.0 0	31.8 7	31.8 7	0.0 0	9.1 2	0.0 0	90.9 22
23 (5/31-6/06)	0	Percent Numbers	0.0 0	2.0 11	0.0 0	1.5 8	19.0 102	0.6 3	0.0 0	33.3 179	32.2 173	1.1 6	10.2 55	0.0 0	100.0 537
24 (6/07-6/13)	195	Percent Numbers	0.0 3	2.1 811	0.0 10	1.5 608	19.1 7,562	0.6 244	0.0 0	33.2 13,106	32.2 12,711	1.0 399	10.3 4,074	0.0 3	100.0 39,532
25 (6/14-6/20)	197	Percent Numbers	0.3 306	2.0 1,794	1.1 978	1.5 1,355	25.0 22,306	4.9 4,358	0.0 0	26.0 23,183	26.2 23,335	0.3 282	12.3 10,977	0.4 313	100.0 89,186
26 (6/21-6/27)	198	Percent Numbers	0.2 120	1.1 626	3.1 1,784	1.2 713	22.2 12,696	12.5 7,114	0.0 0	20.0 11,417	25.4 14,512	0.0 7	13.8 7,857	0.5 285	100.0 57,131
27 (6/28-7/04)	196	Percent Numbers	0.4 59	0.5 71	6.0 832	2.3 318	17.3 2,416	16.0 2,239	0.0 0	18.0 2,522	25.4 3,550	0.4 59	13.4 1,867	0.3 41	100.0 13,974
28 (7/05-7/11)	195	Percent Numbers	3.4 123	0.6 20	10.6 383	2.6 93	16.1 582	14.8 536	0.4 13	19.5 703	23.4 845	0.3 10	8.4 304	0.0 0	100.0 3,611
29 (7/12-7/18)	207	Percent Numbers	5.5 398	1.1 80	10.6 770	2.6 188	15.8 1,152	16.6 1,206	0.2 14	20.2 1,470	20.6 1,502	0.3 22	6.6 482	0.0 0	100.0 7,285
30 (7/19-7/21)	0	Percent Numbers	6.3 369	1.4 85	10.1 596	2.9 170	15.5 908	17.9 1,050	0.0 0	20.3 1,192	18.8 1,107	0.5 28	6.3 369	0.0 0	100.0 5,874
Total	1,188	Percent Numbers	0.6 1,378	1.6 3,498	2.5 5,353	1.6 3,453	22.0 47,728	7.7 16,750	0.0 27	24.8 53,779	26.6 57,742	0.4 813	12.0 25,987	0.3 642	100.0 217,152

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.4. Estimated age composition of Karluk Lake late run sockeye salmon escapement by week, post July 21, 1992^a.

Week	Sample Size		Ages											Total	
			0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	2.3	3.2	2.4		3.3
30 (7/22-7/25)	200	Percent Numbers	0.0 0	1.5 42	0.0 0	0.0 0	5.5 153	2.5 69	24.5 681	4.5 125	25.5 708	27.0 750	0.5 14	8.5 236	100.0 2,778
31 (7/26-8/01)	149	Percent Numbers	0.0 0	2.0 80	0.0 0	0.0 0	4.7 192	2.1 85	25.1 1,031	6.9 281	23.0 942	26.9 1,105	0.3 13	9.1 373	100.0 4,102
32 (8/02-8/08)	183	Percent Numbers	0.0 0	1.8 51	0.0 0	3.2 89	5.1 144	1.6 45	29.4 828	2.7 77	17.3 486	31.8 895	0.0 0	7.1 201	100.0 2,815
33 (8/09-8/15)	194	Percent Numbers	0.3 69	0.6 119	0.0 0	2.7 539	3.2 656	0.6 117	27.1 5,494	1.0 213	15.7 3,180	36.9 7,489	1.0 200	10.9 2,220	100.0 20,296
34 (8/16-8/22)	176	Percent Numbers	1.0 200	0.5 93	0.0 0	0.3 50	0.2 47	0.0 0	33.6 6,415	0.6 116	16.1 3,070	37.8 7,197	0.2 35	9.7 1,840	100.0 19,064
35 (8/23-8/29)	155	Percent Numbers	0.9 872	0.2 246	0.0 0	0.4 379	0.0 0	0.0 0	25.7 26,277	0.2 246	11.8 12,077	50.6 51,680	0.0 0	10.2 10,392	100.0 102,170
36 (8/30-9/05)	103	Percent Numbers	0.1 28	0.0 0	0.0 0	0.1 28	0.0 0	0.0 0	29.3 8,808	0.0 0	11.2 3,362	54.4 16,363	0.0 0	4.9 1,472	100.0 30,060
37 (9/06-9/12)	217	Percent Numbers	0.0 0	0.0 0	0.4 1,048	0.2 524	0.0 0	0.0 0	23.6 60,364	0.0 0	9.5 24,413	63.3 161,795	0.0 0	3.0 7,612	100.0 255,756
38 (9/13-9/19)	56	Percent Numbers	0.0 0	0.0 0	0.7 363	0.3 181	0.0 0	0.0 0	11.5 6,123	0.0 0	10.3 5,470	75.0 39,998	0.0 0	2.3 1,225	100.0 53,361
39 (9/20-9/26)	125	Percent Numbers	0.7 518	0.0 0	0.0 0	0.7 518	0.0 0	0.0 0	12.1 9,224	0.0 0	11.1 8,493	72.2 55,120	0.0 0	3.3 2,487	100.0 76,360
40 (9/27-10/3)	0	Percent Numbers	0.8 380	0.0 0	0.0 0	0.8 380	0.0 0	0.0 0	13.6 6,460	0.0 0	9.6 4,560	72.0 34,200	0.0 0	3.2 1,520	100.0 47,500
Total	1,558	Percent Numbers	0.3 2,067	0.1 631	0.2 1,411	0.4 2,688	0.2 1,192	0.1 316	21.4 131,705	0.2 1,058	10.9 66,761	61.3 376,592	0.0 262	4.8 29,578	100.0 614,262

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.5. Estimated age composition of Red Lake sockeye salmon escapement by week, 1992^a.

Week	Sample Size		Ages												Total	
			1.1	0.3	1.2	2.1	1.3	2.2	3.1	1.4	2.3	3.2	2.4	3.3		3.4
21 (5/17-5/23)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 1
22 (5/24-5/30)	0	Percent Numbers	0.0 0	0.7 1	10.7 16	0.7 1	10.7 16	47.7 71	0.7 1	0.0 0	24.2 36	1.3 2	0.0 0	2.7 4	0.7 1	100.0 149
23 (5/31-6/06)	0	Percent Numbers	0.0 0	0.5 40	10.5 843	0.5 40	10.9 883	47.8 3,851	1.0 80	0.0 0	24.4 1,966	1.5 120	0.0 0	2.5 201	0.5 40	100.0 8,064
24 (6/07-6/13)	201	Percent Numbers	0.0 14	0.5 254	10.4 5,484	0.5 254	11.0 5,781	47.5 25,005	1.0 523	0.0 0	24.7 13,019	1.5 777	0.0 0	2.4 1,272	0.5 254	100.0 52,639
25 (6/14-6/20)	106	Percent Numbers	0.4 140	0.3 119	10.1 3,907	0.3 119	11.4 4,446	44.3 17,201	1.0 379	0.0 0	29.1 11,310	1.3 498	0.0 0	1.5 597	0.3 119	100.0 38,836
26 (6/21-6/27)	29	Percent Numbers	0.3 24	2.2 154	10.0 704	0.0 0	15.4 1,085	36.0 2,533	0.3 24	0.0 0	35.3 2,485	0.3 24	0.0 0	0.0 0	0.0 0	100.0 7,035
27 (6/28-7/04)	206	Percent Numbers	0.0 0	0.4 263	13.6 8,224	0.4 256	14.9 9,007	38.7 23,397	0.4 256	0.0 0	30.2 18,270	0.0 0	0.0 0	1.3 769	0.0 0	100.0 60,443
28 (7/05-7/11)	216	Percent Numbers	0.2 76	0.0 0	15.7 6,286	1.0 419	17.3 6,934	36.7 14,667	0.5 190	0.2 76	27.3 10,934	0.2 76	0.0 0	0.9 343	0.0 0	100.0 40,002
29 (7/12-7/18)	214	Percent Numbers	0.1 38	0.0 4	10.6 2,710	0.9 228	21.0 5,364	35.0 8,954	0.1 38	0.1 38	30.4 7,774	0.8 196	0.3 82	0.6 163	0.0 0	100.0 25,589
30 (7/19-7/25)	214	Percent Numbers	0.0 0	0.3 68	8.0 2,164	0.2 58	18.7 5,056	36.0 9,705	0.0 0	0.0 0	34.7 9,360	0.7 184	0.5 126	0.9 252	0.0 0	100.0 26,973
31 (7/26-8/01)	79	Percent Numbers	0.0 0	0.4 152	10.0 3,981	0.2 90	15.8 6,301	38.6 15,353	0.0 0	0.0 0	32.9 13,092	0.6 243	0.6 243	0.8 305	0.0 0	100.0 39,761
32 (8/02-8/08)	0	Percent Numbers	0.0 0	0.0 0	12.0 657	1.0 55	8.5 466	59.6 3,269	0.0 0	0.0 0	17.0 931	1.2 64	0.8 46	0.0 0	0.0 0	100.0 5,488
33 (8/09-8/15)	206	Percent Numbers	0.0 0	0.0 0	7.6 1,203	0.6 100	4.5 714	71.8 11,420	0.0 0	0.0 0	14.2 2,257	1.0 163	0.2 37	0.0 0	0.0 0	100.0 15,895
34 (8/16-8/22)	0	Percent Numbers	0.0 0	0.0 0	5.8 863	0.5 72	2.9 431	76.7 11,358	0.0 0	0.0 0	13.1 1,941	1.0 144	0.0 0	0.0 0	0.0 0	100.0 14,809
35 (8/23-8/29)	0	Percent Numbers	0.0 0	0.0 0	5.8 495	0.5 41	2.9 248	76.7 6,519	0.0 0	0.0 0	13.1 1,114	1.0 83	0.0 0	0.0 0	0.0 0	100.0 8,500
Total	1,471	Percent Numbers	0.1 292	0.3 1,055	10.9 37,537	0.5 1,733	13.6 46,732	44.5 153,303	0.4 1,491	0.0 114	27.5 94,489	0.7 2,574	0.2 534	1.1 3,906	0.1 414	100.0 344,184

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.6. Estimated age composition of Frazer Lake sockeye salmon escapement by week, 1992. a/

Week	Sample Size		Ages									Total
			1.1	1.2	2.1	1.3	2.2	2.3	3.2	2.4	3.3	
25 (6/14-6/20)	0	Percent Numbers	3.9 942	2.5 588	0.5 118	0.5 118	46.3 11,064	42.9 10,240	2.0 471	0.5 118	1.0 235	100.0 23,893
26 (6/21-6/27)	203	Percent Numbers	4.1 2,171	2.7 1,404	0.7 365	0.5 260	46.2 24,449	42.4 22,433	2.0 1,053	0.5 247	1.0 507	100.0 52,888
27 (6/28-7/04)	212	Percent Numbers	6.8 2,587	5.8 2,221	3.9 1,482	0.5 187	45.0 17,197	35.2 13,445	2.3 884	0.0 18	0.5 199	100.0 38,220
28 (7/05-7/11)	232	Percent Numbers	6.8 885	7.5 983	3.8 502	1.2 156	46.4 6,078	31.8 4,167	2.0 264	0.0 2	0.4 59	100.0 13,096
29 (7/12-7/18)	193	Percent Numbers	7.6 2,357	6.5 2,019	4.8 1,500	1.3 404	36.8 11,404	39.6 12,292	2.6 798	0.3 99	0.5 150	100.0 31,023
30 (7/19-7/25)	155	Percent Numbers	12.2 2,733	5.6 1,245	6.5 1,464	2.0 437	33.1 7,412	38.2 8,563	1.6 369	0.6 133	0.2 47	100.0 22,403
31 (7/26-8/01)	206	Percent Numbers	15.8 2,112	6.1 812	7.8 1,038	1.4 187	35.7 4,775	30.2 4,034	2.2 291	0.8 110	0.0 0	100.0 13,360
32 (8/02-8/08)	211	Percent Numbers	20.1 893	4.4 198	10.9 486	0.5 21	37.0 1,648	25.2 1,121	1.2 55	0.3 11	0.4 16	100.0 4,447
33 (8/09-8/15)	0	Percent Numbers	21.3 350	3.8 62	11.8 194	0.5 8	37.4 614	24.2 396	0.5 8	0.0 0	0.5 8	100.0 1,640
34 (8/16-8/22)	0	Percent Numbers	21.3 1,057	3.8 188	11.8 587	0.5 23	37.4 1,856	24.2 1,198	0.5 23	0.0 0	0.5 23	100.0 4,958
35 (8/23-8/29)	0	Percent Numbers	21.3 43	3.8 8	11.8 24	0.5 1	37.4 76	24.2 49	0.5 1	0.0 0	0.5 1	100.0 202
36 (8/30-9/05)	0	Percent Numbers	21.3 26	3.8 5	11.8 15	0.5 1	37.4 46	24.2 30	0.5 1	0.0 0	0.5 1	100.0 123
37 (9/06-9/12)	0	Percent Numbers	21.3 33	3.8 6	11.8 18	0.5 1	37.4 57	24.2 37	0.5 1	0.0 0	0.5 1	100.0 153
Total	1,412	Percent Numbers	7.8 16,189	4.7 9,739	3.8 7,793	0.9 1,804	42.0 86,676	37.8 78,005	2.0 4,219	0.4 738	0.6 1,247	100.0 206,406

a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.7. Estimated age composition of Akalura Lake early run sockeye salmon escapement by week, through July 21, 1992^a.

Week	Sample Size		AGES							Total
			1.1	1.2	2.1	1.3	2.2	1.4	2.3	
22 (5/24-5/30)	0	Percent	0.0	15.2	0.5	47.5	24.5	1.0	11.3	100.0
		Numbers	0	2	0	6	3	0	1	13
23 (5/31-6/06)	0	Percent	0.0	15.2	0.5	47.5	24.5	1.0	11.3	100.0
		Numbers	0	40	1	126	65	3	30	265
24 (6/07-6/13)	204	Percent	0.1	14.7	0.8	48.8	23.7	0.9	10.9	100.0
		Numbers	1	121	6	401	195	7	90	822
25 (6/14-6/20)	214	Percent	0.8	12.7	2.0	54.3	20.4	0.6	9.3	100.0
		Numbers	8	126	20	542	204	6	93	998
26 (6/21-6/27)	0	Percent	0.9	12.1	2.3	55.6	19.6	0.5	8.9	100.0
		Numbers	2	25	5	115	41	1	18	207
27 (6/28-7/04)	0	Percent	0.9	12.1	2.3	55.6	19.6	0.5	8.9	100.0
		Numbers	1	10	2	45	16	0	7	81
28 (7/05-7/11)	0	Percent	0.9	12.1	2.3	55.6	19.6	0.5	8.9	100.0
		Numbers	0	4	1	19	7	0	3	35
29 (7/12-7/18)	0	Percent	0.9	12.1	2.3	55.6	19.6	0.5	8.9	100.0
		Numbers	0	1	0	7	2	0	1	12
30 (7/19-7/25)	0	Percent	0.9	12.1	2.3	55.6	19.6	0.5	8.9	100.0
		Numbers	0	6	1	28	10	0	5	51
Total	418	Percent	0.5	13.5	1.4	51.9	21.9	0.7	10.0	99.8
		Numbers	12	335	36	1,289	543	17	248	2,484

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.8. Estimated age composition of Akalura Lake late run sockeye salmon escapement by week, post July 21, 1992^a.

Week	Sample Size		Ages						Total
			1.2	2.1	1.3	2.2	2.3	3.2	
30 (7/22-7/25)	0	Percent	6.7	6.7	6.7	53.3	26.7	0.0	100.0
		Numbers	5	5	5	37	18	0	69
31 (7/26-8/01)	15	Percent	6.7	6.7	6.7	53.3	26.7	0.0	100.0
		Numbers	19	19	19	153	77	0	287
32 (8/02-8/08)	257	Percent	1.6	0.3	4.7	77.2	16.2	0.0	100.0
		Numbers	19	3	56	911	192	0	1,181
33 (8/09-8/15)	211	Percent	1.7	0.0	3.3	79.9	15.0	0.1	100.0
		Numbers	335	0	638	15,431	2,893	17	19,314
34 (8/16-8/22)	70	Percent	0.7	0.0	2.2	83.4	12.9	0.9	100.0
		Numbers	196	0	578	22,320	3,447	235	26,776
35 (8/23-8/29)	0	Percent	0.0	0.0	1.4	85.7	11.4	1.4	100.0
		Numbers	0	0	176	10,538	1,405	176	12,294
36 (8/30-9/05)	0	Percent	0.0	0.0	1.4	85.7	11.4	1.4	100.0
		Numbers	0	0	11	670	89	11	782
37 (9/06-9/12)	0	Percent	0.0	0.0	1.4	85.7	11.4	1.4	100.0
		Numbers	0	0	2	93	12	2	109
Total	553	Percent	0.9	0.0	2.4	82.5	13.4	0.7	100.0
		Numbers	574	27	1,485	50,153	8,133	441	60,812

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.9. Estimated age composition of Upper Station early run sockeye salmon escapement by week, 1992^a.

Week	Sample Size		Ages												Total	
			0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	1.4	2.3	3.2	2.4		3.3
24 (6/07-6/13)	359	Percent Numbers	0.0 0	1.0 42	0.0 0	0.0 0	2.5 107	2.6 112	68.9 2,950	0.0 0	0.0 0	22.7 974	1.7 71	0.4 17	0.2 9	100.0 4,282
25 (6/14-6/20)	204	Percent Numbers	0.0 0	2.5 148	0.0 0	0.0 0	4.4 258	0.6 37	73.2 4,318	0.0 0	0.0 0	18.0 1,062	0.4 21	0.8 50	0.1 3	100.0 5,897
26 (6/21-6/27)	201	Percent Numbers	0.0 0	3.0 103	0.0 0	0.0 0	6.0 210	0.8 29	71.0 2,467	0.3 10	0.0 0	17.6 612	0.5 19	0.4 15	0.3 10	100.0 3,474
27 (6/28-7/04)	206	Percent Numbers	0.2 5	2.0 49	0.0 0	0.5 11	5.3 127	1.9 46	69.9 1,673	0.5 12	0.0 0	18.7 447	0.8 18	0.0 0	0.3 6	100.0 2,394
28 (7/05-7/11)	30	Percent Numbers	0.4 5	1.6 19	0.0 0	0.8 10	5.6 67	2.5 30	71.3 846	0.4 5	0.0 0	16.8 199	0.4 5	0.0 0	0.0 0	99.9 1,187
29 (7/12-7/18)	199	Percent Numbers	8.3 78	3.1 29	1.4 13	0.6 6	7.9 74	3.4 32	59.8 560	0.0 0	0.3 3	14.2 133	0.6 6	0.0 0	0.0 0	99.8 936
30 (7/19-7/21)	0	Percent Numbers	12.0 109	1.5 14	2.0 18	1.0 9	1.0 9	3.5 32	56.7 514	0.0 0	0.6 5	20.6 187	1.0 9	0.0 0	0.0 0	100.0 906
Total	1,248	Percent Numbers	1.0 197	2.1 404	0.2 31	0.2 36	4.5 852	1.7 318	69.9 13,328	0.1 27	0.0 8	18.9 3,614	0.8 149	0.4 82	0.1 28	100.0 19,076

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.10. Estimated age composition of Upper Station late run sockeye salmon escapement by week, 1992^a.

Week	Sample Size		Ages									Total	
			0.1	0.2	1.1	0.3	1.2	2.1	1.3	2.2	2.3		3.2
30 (7/22-7/25)	109	Percent Numbers	0.9 3	32.9 107	6.5 21	5.5 18	9.2 30	3.7 12	1.8 6	33.8 110	5.5 18	0.0 0	100.0 325
31 (7/26-8/01)	153	Percent Numbers	0.4 29	38.0 2,785	3.5 260	6.8 500	14.3 1,050	5.6 414	1.2 86	27.0 1,978	3.1 230	0.0 0	100.0 7,333
32 (8/02-8/08)	207	Percent Numbers	0.1 12	28.8 5,968	0.6 128	7.7 1,595	17.2 3,554	1.2 249	4.8 1,003	35.3 7,317	4.2 874	0.0 4	100.0 20,704
33 (8/09-8/15)	198	Percent Numbers	1.0 600	29.5 16,896	0.5 276	6.9 3,933	17.5 10,038	0.3 197	3.9 2,220	35.7 20,405	4.3 2,435	0.4 207	100.0 57,206
34 (8/16-8/22)	187	Percent Numbers	0.8 696	46.3 39,240	0.2 148	6.1 5,166	19.5 16,473	0.2 128	4.3 3,605	18.3 15,495	3.9 3,275	0.5 441	100.0 84,668
35 (8/23-8/29)	0	Percent Numbers	0.4 87	52.2 10,833	0.5 113	6.2 1,295	18.6 3,865	0.0 0	4.3 894	12.7 2,643	4.6 948	0.4 87	100.0 20,765
36 (8/30-9/05)	40	Percent Numbers	0.2 5	49.1 1,620	1.8 60	7.1 233	14.6 482	0.0 0	3.1 103	17.5 576	6.5 214	0.2 5	100.0 3,297
37 (9/06-9/12)	0	Percent Numbers	0.0 0	47.5 1,010	2.5 53	7.5 159	12.5 266	0.0 0	2.5 53	20.0 425	7.5 159	0.0 0	100.0 2,126
38 (9/13-9/19)	0	Percent Numbers	0.0 0	47.5 944	2.5 50	7.5 149	12.5 249	0.0 0	2.5 50	20.0 398	7.5 149	0.0 0	100.1 1,988
39 (9/20/9/26)	0	Percent Numbers	0.0 0	47.5 311	2.4 16	7.5 49	12.5 82	0.0 0	2.4 16	20.0 131	7.5 49	0.0 0	99.8 655
Total	894	Percent Numbers	0.7 1,432	40.0 79,714	0.6 1,125	6.6 13,097	18.1 36,089	0.5 1,000	4.0 8,036	24.9 49,478	4.2 8,351	0.4 744	100.0 199,067

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.11. Estimated age composition of Buskin Lake sockeye salmon escapement by week, 1992^a.

Week	Sample Size		Ages										Total
			1.1	1.2	2.1	1.3	2.2	3.1	1.4	2.3	3.2	2.4	
22 (5/24-5/30)	0	Percent Numbers	0.0 0	9.4 1	3.1 0	21.9 2	9.4 1	0.0 0	0.0 0	56.3 4	0.0 0	0.0 0	100.0 7
23 (5/31-6/06)	0	Percent Numbers	0.0 0	9.4 13	3.1 4	21.9 30	9.4 13	0.0 0	0.0 0	56.3 76	0.0 0	0.0 0	100.0 135
24 (6/07-6/13)	0	Percent Numbers	0.0 0	9.4 222	3.1 74	21.9 519	9.4 222	0.0 0	0.0 0	56.3 1,335	0.0 0	0.0 0	100.0 2,373
25 (6/14-6/20)	32	Percent Numbers	0.0 0	9.4 129	3.1 43	21.9 301	9.4 129	0.0 0	0.0 0	56.3 774	0.0 0	0.0 0	100.0 1,376
26 (6/21-6/27)	49	Percent Numbers	0.0 0	2.3 47	2.1 43	9.3 189	10.1 207	0.0 0	2.7 56	73.0 1,485	0.4 9	0.0 0	100.0 2,036
27 (6/28-7/04)	65	Percent Numbers	0.4 5	2.6 31	5.7 69	10.7 129	13.7 165	0.0 0	3.6 43	62.1 745	1.1 13	0.0 0	100.0 1,199
28 (7/05-7/11)	20	Percent Numbers	3.2 8	3.4 9	3.7 9	8.6 21	15.9 40	0.5 1	0.5 1	63.7 158	0.5 1	0.0 0	100.0 248
29 (7/12-7/18)	74	Percent Numbers	0.1 0	6.0 19	0.9 3	11.5 36	17.2 53	0.9 3	2.8 9	57.8 179	0.9 3	1.9 6	100.0 310
30 (7/19-7/25)	18	Percent Numbers	0.0 0	0.0 0	0.0 0	5.6 32	16.7 95	0.0 0	5.6 32	66.7 379	0.0 0	5.6 32	100.0 569
31 (7/26-8/01)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	5.6 81	16.7 243	0.0 0	5.6 81	66.7 972	0.0 0	5.6 81	100.0 1,458
35 (8/23-8/29)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	5.6 1	16.7 2	0.0 0	5.6 1	66.7 6	0.0 0	5.6 1	100.0 9
36 (8/30-9/05)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	5.6 1	16.7 3	0.0 0	5.6 1	66.7 12	0.0 0	5.6 1	100.0 18
37 (9/06-9/12)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	5.6 1	16.7 2	0.0 0	5.6 1	66.7 7	0.0 0	5.6 1	100.0 11
38 (9/13-9/19)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	5.6 1	16.7 4	0.0 0	5.6 1	66.7 17	0.0 0	5.6 1	100.0 25
40 (9/27-10/3)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	5.6 0	16.7 1	0.0 0	5.6 0	66.7 4	0.0 0	5.6 0	100.0 6
41 (10/04-10/10)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	5.6 0	16.7 0	0.0 0	5.6 0	66.7 1	0.0 0	5.6 0	100.0 2
Total	258	Percent Numbers	0.1 13	4.8 471	2.5 245	13.7 1,344	12.1 1,180	0.0 4	2.3 226	62.9 6,154	0.3 26	1.3 123	100.0 9,782

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.12. Estimated age composition of Uppper Cook Inlet sockeye escapement, 1992.

System	Ages												Total
	0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	
Kenai River													
Number	674			27,116	2,447	794,827	58,227	2,235	109,272				994,798
Percent	.07			2.73	.25	79.90	5.85	.22	10.98				100.00
Sample Size	1			38	3	1,084	75	3	134				1,338
Kasilof River													
Number				38,852	348	50,556	65,030		29,392				184,178
Percent				21.09	.19	27.45	35.31		15.96				100.00
Sample Size				396	4	392	691		234				1,717
Crescent River													
Number				1,500		12,607	7,203		36,019	600		300	58,229
Percent				2.58		21.65	12.37		61.86	1.03		.52	100.00
Sample Size				5		42	24		120	2		1	194
Packers Creek													
Number				3,192		21,705	9,017	80	5,347				39,341
Percent				8.11		55.17	22.92	.20	13.59				100.00
Sample Size				40		272	113	1	67				493
District Total													
Number	674			70,660	2,795	879,695	139,477	2,315	180,030	600		300	1,276,546
Percent	.05			5.54	.22	68.91	10.93	.18	14.10	.05		.02	100.00
Sample Size	1			479	7	1,790	903	4	555	2		1	3,742
Yentna River													
Number	1,079	630	432	20,732	285	19,286	11,268	44	11,998	261	59		66,074
Percent	1.63	.95	.65	31.38	.43	29.19	17.05	.07	18.16	.40	.09		100.00
Sample Size	24	15	10	475	6	430	234	1	249	5	2		1,451
Sunshine station													
Number	57	71	71	14,575		23,515	16,093		8,260		57	71	62,770
Percent	.09	.11	.11	23.22		37.46	25.64		13.16		.09	.11	100.00
Sample Size	1	1	1	228		380	253		130		1	1	996
Fish Creek													
Number		155		54,549	311	3,574	12,898		466	155			72,108
Percent		.21		75.65	.43	4.96	17.89		.65	.21			100.00
Sample Size		1		351	2	23	83		3	1			464
Total													
Number	1,810	856	503	160,516	3,391	926,070	179,736	2,359	200,754	1,016	116	371	1,477,498
Percent	.12	.06	.03	10.86	.23	62.68	12.16	.16	13.59	.07	.01	.03	100.00
Sample Size	26	17	11	1,533	15	2,623	1,473	5	937	8	3	2	6,653

Appendix A.13. Age composition of sockeye salmon scales collected from the Chignik Lagoon commercial fishery, 1992.

Date	Sample Size	Age (Percent)													
		0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	1.4	2.3	3.2	2.4	3.3	Other
6/10	510	0.0	0.0	0.0	4.9	0.0	76.5	3.7	0.0	0.6	14.1	0.0	0.0	0.2	0.0
6/12	524	0.0	0.0	0.0	8.4	0.0	70.6	5.7	0.0	0.2	14.5	0.4	0.0	0.2	0.0
6/16	561	0.0	0.0	0.0	5.3	0.4	62.9	4.6	0.0	0.4	23.2	1.2	0.2	1.8	0.0
6/24	552	0.0	0.0	0.0	6.0	0.2	67.4	5.6	0.0	0.5	18.1	0.7	0.0	1.4	0.0
6/27	496	0.0	0.8	0.0	6.3	0.0	61.1	8.1	0.0	0.0	19.8	3.0	0.0	0.6	0.4
6/30	536	0.0	2.8	0.0	10.6	0.0	70.3	5.4	0.0	0.0	10.1	0.4	0.0	0.4	0.0
7/02	345	0.0	0.0	0.3	8.1	0.3	66.1	7.2	0.0	0.3	16.2	0.9	0.3	0.3	0.0
7/05	533	0.0	0.2	0.4	6.4	0.0	65.1	6.9	0.0	0.2	19.1	1.1	0.4	0.0	0.2
7/07	540	0.0	0.2	0.0	5.4	0.2	55.6	9.3	0.0	0.2	28.9	0.4	0.0	0.0	0.0
7/09	529	0.0	0.0	0.2	4.5	0.0	50.9	13.0	0.0	0.2	30.1	0.8	0.2	0.2	0.0
7/16	513	0.0	1.2	0.0	5.1	0.2	42.7	14.2	0.2	0.0	36.3	0.0	0.2	0.0	0.0
7/18	503	0.2	1.0	0.0	5.8	0.2	35.2	14.7	0.0	0.2	42.5	0.0	0.2	0.0	0.0
7/25	376	0.0	0.8	0.0	1.3	0.0	12.2	20.2	0.0	0.0	65.4	0.0	0.0	0.0	0.0
7/28	516	0.2	0.6	0.2	2.9	0.6	16.7	27.1	0.0	0.0	51.6	0.2	0.0	0.0	0.0
8/03	455	0.0	1.5	0.0	1.3	1.1	8.1	38.9	0.0	0.0	47.7	0.9	0.2	0.2	0.0
8/13	358	0.0	0.0	0.3	2.0	0.0	14.8	28.5	0.0	0.3	52.2	0.6	1.4	0.0	0.0
8/24	267	0.0	0.0	0.0	0.7	0.0	2.2	33.7	0.0	0.0	61.4	0.0	1.9	0.0	0.0
Total		0.0	0.6	0.1	5.2	0.2	48.5	13.4	0.0	0.2	30.6	0.6	0.2	0.3	0.0

Appendix A.14. Estimated age composition of Sitkalidak Section sockeye salmon catch by week, July, 1992^a.

Week	Sample Size		Ages									Total	
			0.2	0.3	1.2	1.3	2.2	1.4	2.3	3.2	2.4		3.3
28 (7/01-7/11)	0	Percent Numbers	0.0 0	0.7 493	3.3 2,219	79.5 53,504	5.5 3,698	0.4 247	9.9 6,657	0.0 0	0.4 247	0.4 247	100.0 67,311
29 (7/12-7/18)	273	Percent Numbers	0.0 14	0.7 2,316	3.3 10,475	79.4 252,630	5.5 17,642	0.4 1,189	9.9 31,493	0.0 21	0.4 1,162	0.4 1,155	100.0 318,096
30 (7/19-7/25)	417	Percent Numbers	0.5 200	0.3 118	2.9 1,283	72.4 32,011	10.9 4,843	1.2 510	11.0 4,851	0.7 300	0.2 109	0.0 9	100.0 44,235
31 (7/26-7/31)	0	Percent Numbers	0.5 32	0.2 16	2.9 192	71.9 4,811	11.3 754	1.2 80	11.0 738	0.7 48	0.2 16	0.0 0	100.0 6,687
Total	690	Percent Numbers	0.1 246	0.7 2,943	3.2 14,169	78.6 342,956	6.2 26,937	0.5 2,026	10.0 43,739	0.1 369	0.4 1,534	0.3 1,411	100.0 436,329

^a Percent age composition was derived using catch numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When a catch occurs prior to the first sample or after the last sample calculations are based on the adjacent sample.

Appendix A.15. Estimated age composition of Afognak Lake sockeye salmon escapement by week, 1993^a.

Week	Sample Size		Ages								Total
			1.1	1.2	2.1	1.3	2.2	3.1	2.3	3.2	
21 (5/17-5/23)	0	Percent Numbers	0.5 0	15.8 0	1.9 0	45.6 1	17.2 1	0.0 0	18.9 1	0.2 0	100.0 3
22 (5/24-5/30)	0	Percent Numbers	0.5 8	15.8 275	1.9 33	45.6 795	17.2 300	0.0 0	18.9 329	0.2 4	100.0 1,743
23 (5/31-6/06)	0	Percent Numbers	0.5 42	15.8 1,376	1.9 167	45.6 3,983	17.2 1,502	0.0 0	18.9 1,647	0.2 21	100.0 8,738
24 (6/07-6/13)	419	Percent Numbers	1.2 143	15.5 1,857	2.6 312	44.9 5,370	16.9 2,027	0.0 1	18.6 2,221	0.2 29	100.0 11,958
25 (6/14-6/20)	0	Percent Numbers	8.1 1,087	13.4 1,788	9.3 1,247	38.4 5,133	14.7 1,966	0.0 6	15.9 2,121	0.2 33	100.0 13,380
26 (6/21-6/27)	0	Percent Numbers	17.1 1,860	10.5 1,143	18.1 1,959	29.8 3,238	11.7 1,275	0.1 11	12.3 1,336	0.3 27	100.0 10,849
27 (6/28-7/04)	0	Percent Numbers	25.6 1,732	7.9 532	26.3 1,776	21.8 1,474	9.0 607	0.2 10	9.0 607	0.3 18	100.0 6,756
28 (7/05-7/11)	0	Percent Numbers	34.3 3,642	5.2 549	34.7 3,682	13.6 1,449	6.2 654	0.2 22	5.6 592	0.3 28	100.0 10,617
29 (7/12-7/18)	362	Percent Numbers	43.2 458	2.3 25	43.1 457	5.2 55	3.6 38	0.2 3	2.1 22	0.3 3	100.0 1,060
30 (7/19-7/25)	71	Percent Numbers	45.1 795	1.4 25	42.3 746	2.8 50	7.0 124	0.0 0	1.4 25	0.0 0	100.0 1,765
31 (7/26-8/01)	0	Percent Numbers	45.1 428	1.4 13	42.3 401	2.8 27	7.0 67	0.0 0	1.4 13	0.0 0	100.0 949
32 (8/02-8/08)	0	Percent Numbers	45.1 98	1.4 3	42.3 92	2.8 6	7.0 15	0.0 0	1.4 3	0.0 0	100.0 217
33 (8/09-8/15)	0	Percent Numbers	45.1 750	1.4 23	42.3 703	2.8 47	7.0 117	0.0 0	1.4 23	0.0 0	100.0 1,664
34 (8/16-8/22)	0	Percent Numbers	45.1 565	1.4 18	42.3 529	2.8 35	7.0 88	0.0 0	1.4 18	0.0 0	100.0 1,253

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Week	Sample Size		Ages								Total
			1.1	1.2	2.1	1.3	2.2	3.1	2.3	3.2	
35 (8/23-8/29)	0	Percent Numbers	45.1 215	1.4 7	42.3 202	2.8 13	7.0 34	0.0 0	1.4 7	0.0 0	100.0 478
36 (8/30-9/05)	0	Percent Numbers	45.1 10	1.4 0	42.3 9	2.8 1	7.0 2	0.0 0	1.4 0	0.0 0	100.0 22
37 (9/06-9/12)	0	Percent Numbers	45.1 4	1.4 0	42.3 3	2.8 0	7.0 1	0.0 0	1.4 0	0.0 0	100.0 8
Total	852	Percent Numbers	16.6 11,837	10.7 7,634	17.2 12,318	30.3 21,677	12.3 8,818	0.1 53	12.5 8,965	0.2 163	100.0 71,460

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.16. Estimated age composition of Thorsheim Lake sockeye salmon escapement samples by week, 1993^a.

Week	Sample Size		Ages								Total
			1.1	1.2	1.3	2.1	2.2	2.3	3.2	3.3	
26 (6/21-6/27)	115	Percent Numbers	0.9 1	3.5 4	6.1 7	1.7 2	35.7 41	47.0 54	4.3 5	0.9 1	100.0
28 (7/05-7/11)	9	Percent Numbers	0.0 0	11.1 1	0.0 0	0.0 0	44.4 4	44.4 4	0.0 0	0.0 0	100.0
Total	124	Percent Numbers	0.8 1	4.0 5	5.6 7	1.6 2	36.3 45	46.8 58	4.0 5	0.8 1	100.0

^a Terminal catch samples used to represent escapement.

Appendix A.17. Estimated age composition of Uganik Lake sockeye salmon escapement samples by week, 1993^a.

Week	Sample Size		Ages								Total
			0.2	1.2	1.3	2.2	2.3	3.2	1.*	2.*	
7/21-7/23	397	Percent	0.3	16.4	26.4	16.6	27.2	0.5	8.8	3.8	100.0
		Number	1	65	105	66	108	2	35 ^a	15 ^b	

^a Fresh water age = 1, ocean age reapsorbed.

^b Fresh water age = 2, ocean age reapsorbed.

Appendix A.18. Estimated age composition of Karluk River early run sockeye salmon escapement by week, through 21 July, 1993^a.

Week	Sample Size		Ages													Total	
			1.1	1.2	2.1	1.3	2.2	3.1	1.4	2.3	3.2	2.4	3.3	4.2	3.4		4.3
22 (5/24-5/30)	0	Percent Numbers	0.0 0	1.5 45	0.0 0	9.1 268	13.1 387	1.0 30	0.5 15	9.6 283	49.0 1,442	0.5 15	15.7 461	0.0 0	0.0 0	0.0 0	100.0 2,944
23 (5/31-6/06)	198	Percent Numbers	0.0 0	1.4 730	0.0 0	6.2 3,303	12.6 6,789	0.7 356	0.3 178	9.6 5,150	55.7 29,933	0.3 178	13.2 7,090	0.0 0	0.0 0	0.0 0	100.0 53,708
24 (6/07-6/13)	188	Percent Numbers	0.0 0	1.1 1,244	0.2 206	0.4 502	14.0 16,325	0.2 217	0.0 5	8.5 9,913	65.3 76,204	0.0 5	10.0 11,635	0.4 413	0.0 0	0.0 0	100.0 116,668
25 (6/14-6/20)	189	Percent Numbers	0.0 0	1.2 692	0.8 460	0.1 49	18.1 10,794	1.5 883	0.0 0	6.1 3,665	59.3 35,363	0.0 0	12.1 7,199	0.9 562	0.0 0	0.0 0	100.0 59,668
26 (6/21-6/27)	202	Percent Numbers	0.1 10	2.1 184	3.8 337	0.6 53	17.8 1,589	10.5 933	0.0 0	3.6 323	52.4 4,665	0.1 10	8.2 734	0.6 56	0.0 0	0.1 10	100.0 8,903
27 (6/28-7/04)	202	Percent Numbers	0.5 31	3.6 236	6.3 419	1.4 95	19.1 1,264	11.5 760	0.0 0	6.4 424	43.3 2,861	0.3 20	6.4 422	0.6 42	0.2 11	0.3 20	100.0 6,605
28 (7/05-7/11)	207	Percent Numbers	0.5 40	6.6 551	5.8 478	2.7 223	22.6 1,874	5.8 484	0.0 0	9.7 802	38.5 3,188	0.0 0	7.3 608	0.2 14	0.3 26	0.0 0	100.0 8,289
29 (7/12-7/18)	212	Percent Numbers	0.6 24	8.3 319	6.7 258	3.1 118	25.8 989	7.4 282	0.0 0	10.2 392	31.3 1,199	0.0 0	6.3 240	0.3 13	0.0 1	0.0 0	100.0 3,833
30 (7/19-7/21)	195	Percent Numbers	1.0 6	8.2 45	9.6 53	2.6 14	29.5 162	7.2 39	0.0 0	6.4 35	30.3 166	0.0 0	5.2 28	0.0 0	0.0 0	0.0 0	100.0 549
Total	1,593	Percent Numbers	0.0 111	1.5 4,046	0.8 2,211	1.8 4,625	15.4 40,173	1.5 3,984	0.1 198	8.0 20,987	59.4 155,021	0.1 228	10.9 28,417	0.4 1,100	0.0 38	0.0 30	100.0 261,167

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.19. Estimated age composition of Karluk River late run sockeye salmon escapement by week, post 21 July, 1993^a.

Week	Sample Size		Ages													Total
			0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	2.3	3.2	2.4	3.3	4.2	
30 (7/22-7/25)	0	Percent Numbers	0.0 0	1.0 8	0.0 0	6.8 59	14.6 126	3.4 29	26.7 231	7.8 67	7.3 63	27.7 240	0.0 0	4.9 42	0.0 0	100.0 866
31 (7/26-8/01)	206	Percent Numbers	0.0 0	1.0 59	0.0 0	7.4 442	15.5 929	3.0 178	26.3 1,580	7.6 458	7.8 472	26.6 1,596	0.0 0	4.9 295	0.0 0	100.0 6,007
32 (8/02-8/08)	201	Percent Numbers	0.2 7	1.2 46	0.0 0	5.9 224	12.3 468	1.8 67	34.5 1,314	5.2 199	7.2 273	26.5 1,009	0.0 0	5.2 199	0.0 0	100.0 3,807
33 (8/09-8/15)	195	Percent Numbers	0.3 4	1.4 18	0.0 0	2.3 30	6.1 80	0.4 6	46.4 603	2.4 31	5.3 69	30.0 389	0.0 0	5.3 69	0.0 0	100.0 1,300
34 (8/16-8/22)	169	Percent Numbers	0.1 36	1.0 253	0.0 0	1.3 355	5.2 1,358	0.4 96	45.4 11,976	2.7 721	5.5 1,445	33.9 8,928	0.0 0	4.4 1,154	0.1 30	100.0 26,352
35 (8/23-8/29)	179	Percent Numbers	0.7 386	0.1 27	0.0 0	1.4 725	2.5 1,332	1.3 698	42.1 22,081	0.6 310	5.7 2,986	37.7 19,800	0.2 115	7.4 3,881	0.3 156	100.0 52,496
36 (8/30-9/05)	194	Percent Numbers	0.9 436	0.0 0	0.1 49	1.0 463	2.4 1,159	1.0 487	31.0 14,857	0.9 447	5.1 2,432	44.3 21,278	0.4 211	12.8 6,147	0.0 14	100.0 47,980
37 (9/06-9/12)	187	Percent Numbers	0.0 42	0.2 264	1.3 1,441	0.0 42	1.6 1,810	0.3 366	23.1 25,525	0.6 630	3.0 3,270	57.6 63,630	0.0 21	12.1 13,343	0.0 0	100.0 110,384
38 (9/13-9/19)	173	Percent Numbers	0.3 184	0.4 267	1.3 801	0.3 184	2.7 1,621	0.0 0	25.7 15,527	1.4 820	1.9 1,170	55.8 33,723	0.0 0	10.2 6,179	0.0 0	100.0 60,476
39 (9/20-9/26)	155	Percent Numbers	1.3 750	0.0 0	0.0 0	1.3 750	3.9 2,249	0.0 0	26.5 15,367	3.9 2,249	2.6 1,499	52.9 30,734	0.0 0	7.7 4,498	0.0 0	100.0 58,095
40 (9/27-10/3)	0	Percent Numbers	1.3 368	0.0 0	0.0 0	1.3 368	3.9 1,104	0.0 0	26.5 7,545	3.9 1,104	2.6 736	52.9 15,091	0.0 0	7.7 2,208	0.0 0	100.0 28,525
Total	1,659	Percent Numbers	0.6 2,213	0.2 942	0.6 2,291	0.9 3,642	3.1 12,236	0.5 1,927	29.4 116,606	1.8 7,036	3.6 14,415	49.6 196,418	0.1 347	9.6 38,015	0.1 200	100.0 396,288

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.20. Estimated age composition of Red Lake sockeye salmon escapement by week, 1993^a.

Week	Sample Size		Ages											Total
			1.1	0.3	1.2	2.1	1.3	2.2	3.1	2.3	3.2	2.4	3.3	
21 (5/17-5/23)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	6.8 1	4.3 0	0.0 0	81.6 8	5.3 1	0.5 0	1.4 0	100.0 10
22 (5/24-5/30)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	0.0 0	6.8 429	4.3 276	0.0 0	81.6 5,183	5.3 337	0.5 31	1.4 92	100.0 6,348
23 (5/31-6/06)	207	Percent Numbers	0.0 0	0.0 5	0.0 5	0.0 8	6.7 2,259	4.4 1,475	0.0 0	81.5 27,294	5.4 1,799	0.5 159	1.5 493	100.0 33,497
24 (6/07-6/13)	202	Percent Numbers	0.0 0	1.0 821	1.0 897	1.3 1,080	5.2 4,499	7.7 6,630	0.0 0	73.5 63,272	7.6 6,569	0.2 167	2.6 2,205	100.0 86,141
25 (6/14-6/20)	203	Percent Numbers	0.1 18	1.0 122	2.3 289	2.2 276	4.1 509	11.5 1,432	0.1 18	71.4 8,872	4.7 581	0.7 85	1.9 232	100.0 12,433
26 (6/21-6/27)	205	Percent Numbers	0.4 70	1.1 206	5.1 947	6.1 1,129	8.5 1,581	20.2 3,757	0.4 70	46.9 8,700	8.1 1,500	0.0 4	3.2 594	100.0 18,557
27 (6/28-7/04)	124	Percent Numbers	0.3 11	1.3 49	6.9 264	8.8 338	19.2 736	18.1 693	0.1 3	40.3 1,548	3.7 142	0.1 2	1.3 50	100.0 3,836
28 (7/05-7/11)	205	Percent Numbers	0.7 128	0.5 93	5.9 1,075	16.9 3,062	14.8 2,680	25.0 4,530	0.0 0	32.1 5,812	2.9 533	0.2 43	0.7 134	100.0 18,088
29 (7/12-7/18)	204	Percent Numbers	0.2 64	0.6 189	8.1 2,598	5.3 1,709	12.7 4,079	42.2 13,512	0.0 0	27.2 8,732	3.1 981	0.0 0	0.6 189	100.0 32,053
30 (7/19-7/25)	200	Percent Numbers	0.2 8	0.0 0	5.1 194	6.5 251	9.2 355	51.4 1,973	0.0 0	23.0 884	3.4 130	0.0 0	1.2 45	100.0 3,840
31 (7/26-8/01)	199	Percent Numbers	0.0 0	0.0 0	4.4 1,339	7.1 2,170	9.4 2,902	49.0 15,071	0.0 0	24.6 7,563	4.2 1,285	0.0 0	1.4 443	100.0 30,772
32 (8/02-8/08)	203	Percent Numbers	0.1 16	0.0 0	6.9 921	5.0 670	6.0 801	55.3 7,350	0.1 16	21.0 2,791	5.1 681	0.0 0	0.4 51	100.0 13,297
33 (8/09-8/15)	187	Percent Numbers	0.4 66	0.0 0	6.0 997	4.5 747	6.0 1,011	55.3 9,274	0.5 87	20.5 3,440	6.5 1,098	0.0 0	0.2 39	100.0 16,759

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Week	Sample Size		Ages											Total
			1.1	0.3	1.2	2.1	1.3	2.2	3.1	2.3	3.2	2.4	3.3	
34 (8/16-8/22)	68	Percent Numbers	0.1 3	0.0 0	7.6 353	10.8 499	0.1 7	53.5 2,476	2.6 120	21.2 980	1.5 71	0.1 3	2.6 120	100.0 4,632
35 (8/23-8/29)	204	Percent Numbers	0.5 27	0.0 0	1.1 65	5.4 319	0.9 54	64.2 3,792	0.7 39	24.2 1,431	1.9 114	0.5 27	0.7 39	100.0 5,907
Total	2,411	Percent Numbers	0.1 411	0.5 1,485	3.5 9,944	4.3 12,258	7.7 21,903	25.2 72,241	0.1 353	51.2 146,510	5.5 15,822	0.2 521	1.7 4,726	100.0 286,170

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.21. Estimated age composition of Frazer Lake sockeye salmon escapement by week, 1993^a.

Week	Sample Size		Ages										Total ^b
			1.1	0.3	1.2	2.1	1.3	2.2	3.1	2.3	3.2	3.3	
24 (6/07-6/13)	0	Percent	0.0	0.0	27.1	0.5	4.8	27.1	0.0	38.1	0.0	2.4	100.0
		Numbers	0	0	6,890	121	1,209	6,890	0	9,670	0	604	25,383
25 (6/14-6/20)	210	Percent	0.0	0.0	27.3	0.5	4.8	27.1	0.0	37.9	0.0	2.4	100.0
		Numbers	0	0	6,269	118	1,091	6,225	0	8,691	0	543	22,937
26 (6/21-6/27)	212	Percent	0.1	0.0	40.5	3.2	4.3	26.7	0.0	23.7	0.0	1.5	100.0
		Numbers	30	0	12,053	940	1,288	7,948	0	7,048	0	455	29,763
27 (6/28-7/04)	214	Percent	0.7	0.0	46.6	4.5	4.4	26.7	0.0	16.4	0.0	0.8	100.0
		Numbers	211	0	13,232	1,273	1,244	7,587	0	4,649	0	220	28,416
28 (7/05-7/11)	214	Percent	0.5	0.0	44.7	6.0	4.6	28.9	0.0	14.7	0.0	0.5	100.0
		Numbers	208	6	17,854	2,382	1,835	11,544	0	5,885	0	208	39,924
29 (7/12-7/18)	222	Percent	0.6	0.3	52.7	10.3	2.8	23.4	0.2	9.5	0.0	0.2	100.0
		Numbers	79	35	7,241	1,421	386	3,210	26	1,312	0	27	13,737
30 (7/19-7/25)	221	Percent	1.3	0.0	47.6	16.9	1.1	23.3	0.4	9.0	0.0	0.4	100.0
		Numbers	304	11	11,500	4,091	254	5,630	88	2,183	0	88	24,148
31 (7/26-8/01)	218	Percent	1.8	0.0	50.2	15.5	1.9	26.2	0.1	4.3	0.0	0.0	100.0
		Numbers	161	0	4,525	1,401	173	2,363	8	383	0	1	9,014
32 (8/02-8/08)	195	Percent	1.7	0.0	42.9	23.1	0.5	29.0	0.4	2.1	0.2	0.0	100.0
		Numbers	52	0	1,290	695	14	873	11	64	6	0	3,006
33 (8/09-8/15)	202	Percent	2.5	0.0	54.1	19.4	1.5	18.2	0.0	3.4	1.0	0.0	100.0
		Numbers	44	0	963	346	26	323	0	61	17	0	1,780
34 (8/16-8/22)	0	Percent	2.5	0.0	54.5	19.3	1.5	17.8	0.0	3.5	1.0	0.0	100.0
		Numbers	5	0	113	40	3	37	0	7	2	0	207
35 (8/23-8/29)	0	Percent	2.5	0.0	54.5	19.3	1.5	17.8	0.0	3.5	1.0	0.0	100.0
		Numbers	2	0	46	16	1	15	0	3	1	0	84
36 (8/30-9/05)	0	Percent	2.5	0.0	54.5	19.3	1.5	17.8	0.0	3.5	1.0	0.0	100.0
		Numbers	0	0	7	3	0	2	0	0	0	0	13
Total	1,908	Percent	0.6	0.0	41.3	6.5	3.8	26.5	0.1	20.1	0.0	1.1	100.0
		Numbers	1,096	52	81,983	12,847	7,524	52,647	133	39,956	26	2,146	198,412

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

^b Dog Salmon creek escapement numbers (adjusted 7 days forward in time) interpolated daily between Frazer Lake sampling events.

Appendix A.22. Estimated age composition of Akalura Lake early run sockeye salmon escapement by week, through July 21, 1993^a.

Week	Sample Size		Ages					Total
			1.2	1.3	2.2	2.3	3.2	
23 (5/31-6/06)	0	Percent	5.1	51.5	17.2	24.2	2.0	100.0
		Numbers	31	314	105	148	12	610
24 (6/07-6/13)	99	Percent	5.1	51.5	17.2	24.2	2.0	100.0
		Numbers	43	436	145	205	17	847
25 (6/14-6/20)	0	Percent	5.1	51.5	17.2	24.2	2.0	100.0
		Numbers	11	110	37	52	4	214
26 (6/21-6/27)	0	Percent	5.1	51.5	17.2	24.2	2.0	100.0
		Numbers	3	29	10	14	1	57
27 (6/28-7/04)	0	Percent	5.1	51.5	17.2	24.2	2.0	100.0
		Numbers	3	32	11	15	1	62
28 (7/05-7/11)	0	Percent	5.1	51.5	17.2	24.2	2.0	100.0
		Numbers	1	8	3	4	0	16
29 (7/12-7/18)	0	Percent	5.1	51.5	17.2	24.2	2.0	100.0
		Numbers	0	1	0	0	0	1
Total	99	Percent	5.1	51.5	17.2	24.2	1.9	99.9
		Numbers	92	930	311	438	35	1,807

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.23. Estimated age composition of Akalura Lake late run sockeye salmon escapement by week, post July 21, 1993^a.

Week	Sample Size		Ages								Total
			1.1	1.2	2.1	1.3	2.2	3.1	2.3	3.2	
31 (7/26-8/01)	0	Percent Numbers	0.0 0	12.9 0	0.0 0	12.9 0	22.6 1	0.0 0	51.6 2	0.0 0	100.0 3
32 (8/02-8/08)	31	Percent Numbers	0.0 0	13.9 9	0.0 0	12.3 8	24.6 17	0.0 0	49.2 33	0.0 0	100.0 68
33 (8/09-8/15)	27	Percent Numbers	0.0 0	20.9 820	0.0 0	8.2 320	38.2 1,498	0.0 0	32.7 1,281	0.0 0	100.0 3,920
34 (8/16-8/22)	433	Percent Numbers	0.2 22	18.4 2,349	0.1 14	3.9 495	46.9 5,983	0.2 22	30.1 3,837	0.2 22	100.0 12,744
35 (8/23-8/29)	170	Percent Numbers	0.0 0	17.1 1,492	0.6 51	3.5 309	46.5 4,063	0.0 0	32.3 2,827	0.0 0	100.0 8,743
36 (8/30-9/05)	0	Percent Numbers	0.0 0	17.1 551	0.6 19	3.5 114	46.5 1,502	0.0 0	32.4 1,046	0.0 0	100.0 3,232
37 (9/06-9/12)	0	Percent Numbers	0.0 0	17.1 30	0.6 1	3.5 6	46.5 81	0.0 0	32.4 57	0.0 0	100.0 175
Total	661	Percent Numbers	0.1 22	18.2 5,251	0.3 85	4.3 1,252	45.5 13,145	0.1 22	31.4 9,083	0.1 22	100.0 28,885

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.24. Estimated age composition of Upper Station early run sockeye salmon escapement by week, 1993^a.

Week	Sample Size		Ages											Total
			0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	2.3	3.2	3.3	
22 (5/24-5/30)	0	Percent Numbers	0.0 0	0.0 0	0.0 0	5.4 32	1.8 11	0.5 3	32.0 192	0.0 0	57.2 344	1.4 8	1.8 11	100.0 601
23 (5/31-6/06)	222	Percent Numbers	0.0 0	0.2 13	0.0 0	5.7 319	2.6 147	0.5 25	34.2 1,924	0.0 0	54.1 3,046	1.2 67	1.6 89	100.0 5,630
24 (6/07-6/13)	213	Percent Numbers	0.0 0	2.0 260	0.0 0	6.9 902	16.5 2,140	0.4 51	43.2 5,618	0.3 40	30.2 3,927	0.3 37	0.2 23	100.0 12,998
25 (6/14-6/20)	210	Percent Numbers	0.0 0	2.9 69	0.3 6	6.8 166	43.2 1,049	0.1 2	31.9 773	1.6 39	12.1 293	1.1 26	0.1 3	100.0 2,428
26 (6/21-6/27)	214	Percent Numbers	0.1 4	1.7 76	0.8 37	10.6 487	24.5 1,125	0.1 4	44.8 2,054	1.7 77	13.7 629	1.6 75	0.4 16	100.0 4,585
27 (6/28-7/04)	220	Percent Numbers	0.4 13	2.3 83	1.5 52	15.2 546	31.1 1,115	0.4 13	37.3 1,339	1.0 36	9.7 346	1.3 46	0.0 0	100.0 3,589
28 (7/05-7/11)	78	Percent Numbers	0.3 1	3.0 14	4.0 19	17.1 82	37.1 178	0.4 2	27.9 134	1.3 6	6.9 33	2.0 10	0.0 0	100.0 481
29 (7/12-7/18)	59	Percent Numbers	3.6 14	4.7 19	12.1 48	14.8 59	37.0 148	4.4 17	16.7 67	1.3 5	5.0 20	0.5 2	0.0 0	100.0 399
30 (7/19-7/21)	210	Percent Numbers	11.8 489	1.1 44	45.0 1,864	10.9 452	9.7 400	10.7 442	7.2 298	0.2 7	3.5 145	0.0 0	0.0 0	100.0 4,141
Total	1,426	Percent Numbers	1.5 521	1.7 578	5.8 2,026	8.7 3,045	18.1 6,313	1.6 559	35.6 12,399	0.6 210	25.2 8,783	0.8 271	0.4 142	100.0 34,852

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.25. Estimated age composition of Upper Station late run sockeye salmon escapement by week, post July 21, 1993^a.

Week	Sample Size		Ages													Total
			0.1	0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	1.4	2.3	3.2	3.3	
30 (7/22-7/25)	0	Percent Numbers	0.0 0	21.0 1,848	0.5 42	43.8 3,864	4.8 420	1.0 84	17.1 1,512	4.3 378	0.0 0	0.0 0	6.7 588	1.0 84	0.0 0	100.0 8,820
31 (7/26-8/01)	210	Percent Numbers	0.6 93	22.9 3,753	0.7 110	35.7 5,857	13.0 2,132	1.1 188	15.7 2,583	3.8 630	0.0 0	0.0 0	5.5 900	1.1 173	0.0 0	100.0 16,417
32 (8/02-8/08)	204	Percent Numbers	2.7 327	26.8 3,281	1.8 227	2.8 341	41.0 5,030	2.1 262	12.1 1,477	6.5 791	0.1 12	0.1 12	2.0 242	2.1 253	0.0 0	100.0 12,255
33 (8/09-8/15)	201	Percent Numbers	2.8 1,119	14.6 5,862	3.2 1,271	2.2 868	21.9 8,839	2.9 1,177	17.8 7,177	22.9 9,208	0.4 161	0.4 161	6.4 2,577	4.6 1,854	0.0 0	100.0 40,273
34 (8/16-8/22)	196	Percent Numbers	6.4 3,183	19.9 9,892	2.0 1,019	3.0 1,506	13.3 6,595	5.6 2,786	10.2 5,046	27.1 13,448	0.0 4	0.0 4	5.4 2,663	6.9 3,442	0.2 122	100.0 49,710
35 (8/23-8/29)	202	Percent Numbers	3.8 1,145	15.7 4,741	2.0 602	1.8 559	17.5 5,288	11.6 3,499	11.8 3,574	24.9 7,535	0.0 0	0.0 0	3.5 1,064	6.6 1,983	0.8 247	100.0 30,238
36 (8/30-9/05)	0	Percent Numbers	3.0 669	14.4 3,232	2.0 446	1.5 334	18.8 4,236	13.4 3,010	12.4 2,787	24.3 5,462	0.0 0	0.0 0	3.0 669	6.4 1,449	1.0 223	100.0 22,516
37 (9/06-9/12)	0	Percent Numbers	3.0 217	14.4 1,048	2.0 145	1.5 108	18.8 1,373	13.4 976	12.4 903	24.3 1,771	0.0 0	0.0 0	3.0 217	6.4 470	1.0 72	100.0 7,300
Total	1,013	Percent Numbers	3.6 6,753	17.9 33,657	2.1 3,862	7.2 13,437	18.1 33,913	6.4 11,982	13.4 25,059	20.9 39,223	0.1 177	0.1 177	4.8 8,920	5.2 9,708	0.4 664	100.0 187,529

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.26. Estimated age composition of SALTERY Lake sockeye salmon escapement by week, 1993^a.

Week	Sample Size		Ages							Total
			0.3	1.2	2.1	1.3	2.2	2.3	3.3	
26 (6/21-6/27)	0	Percent Numbers	0.2 7	0.8 27	0.2 7	10.5 358	23.0 783	64.7 2,203	0.6 20	100.0 3,404
27 (6/28-7/04)	0	Percent Numbers	0.2 36	0.8 142	0.2 36	10.5 1,923	23.0 4,203	64.7 11,825	0.6 107	100.0 18,272
28 (7/05-7/11)	513	Percent Numbers	0.2 36	0.8 142	0.2 36	10.5 1,923	23.0 4,201	64.7 11,821	0.6 107	100.0 18,265
29 (7/12-7/18)	0	Percent Numbers	0.2 21	0.8 86	0.2 21	10.5 1,158	23.0 2,530	64.7 7,118	0.6 64	100.0 10,998
30 (7/19-7/25)	0	Percent Numbers	0.2 22	0.8 89	0.2 22	10.5 1,199	23.0 2,619	64.7 7,369	0.6 67	100.0 11,386
31 (7/26-8/01)	0	Percent Numbers	0.2 17	0.8 67	0.2 17	10.5 910	23.0 1,989	64.7 5,596	0.6 51	100.0 8,647
32 (8/02-8/08)	0	Percent Numbers	0.2 8	0.8 34	0.2 8	10.5 456	23.0 997	64.7 2,805	0.6 25	100.0 4,335
33 (8/09-8/15)	0	Percent Numbers	0.2 4	0.8 15	0.2 4	10.5 198	23.0 432	64.7 1,216	0.6 11	100.0 1,879
Total	513	Percent Numbers	0.2 151	0.8 602	0.2 151	10.5 8,125	23.0 17,754	64.7 49,953	0.6 452	100.0 77,186

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.27. Estimated age composition of Buskin Lake sockeye salmon escapement by week, 1993^a.

Week	Sample Size		Ages									Total
			1.1	1.2	2.1	1.3	2.2	2.3	3.2	2.4	3.3	
22 (5/24-5/30)	0	Percent Numbers	0.0 0	7.1 5	1.0 1	3.1 2	12.2 8	71.4 49	1.0 1	3.1 2	1.0 1	100.0 69
23 (5/31-6/06)	0	Percent Numbers	0.0 0	7.1 107	1.0 15	3.1 46	12.2 183	71.4 1,069	1.0 15	3.1 46	1.0 15	100.0 1,496
24 (6/07-6/13)	98	Percent Numbers	0.0 0	7.2 169	1.0 24	3.0 71	12.6 298	71.2 1,683	1.1 26	3.0 71	1.0 23	100.0 2,364
25 (6/14-6/20)	82	Percent Numbers	0.0 0	8.3 122	0.9 13	2.1 31	20.0 293	65.8 964	1.7 26	1.1 15	0.1 1	100.0 1,466
26 (6/21-6/27)	69	Percent Numbers	0.0 0	12.1 143	0.6 8	4.0 47	19.5 230	63.2 746	0.6 8	0.0 0	0.0 0	100.0 1,182
27 (6/28-7/04)	36	Percent Numbers	0.0 0	13.4 45	2.2 7	3.1 10	17.4 58	61.7 206	2.2 7	0.0 0	0.0 0	100.0 334
28 (7/05-7/11)	0	Percent Numbers	1.0 2	14.1 32	4.6 10	3.0 7	18.6 42	55.6 125	3.0 7	0.0 0	0.0 0	100.0 224
29 (7/12-7/18)	91	Percent Numbers	1.7 9	13.1 71	5.7 31	2.5 14	24.8 135	49.0 266	3.2 18	0.0 0	0.0 0	100.0 544
30 (7/19-7/25)	32	Percent Numbers	0.2 0	9.7 8	3.4 3	0.3 0	36.2 29	47.1 38	3.1 3	0.0 0	0.0 0	100.0 80
31 (7/26-8/01)	0	Percent Numbers	0.0 0	9.4 166	3.1 55	0.0 0	37.5 663	46.9 828	3.1 55	0.0 0	0.0 0	100.0 1,767
Total	408	Percent Numbers	0.1 11	9.1 868	1.8 167	2.4 228	20.4 1,939	62.7 5,974	1.7 166	1.4 134	0.4 40	100.0 9,526

^a Percent age composition was derived using escapement numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When escapement occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.28. Age composition of Upper Cook Inlet sockeye salmon escapement by System, 1993.

System	Ages												Total
	0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	1.4	2.3	3.2	2.4	
Crescent River													
Sample period: 1 July-2 August													
Escapement		81		3,311	323	13,972	2,180			17,608		81	37,556
Percent		0.22		8.82	0.86	37.20	5.80			46.88		0.22	100.00
Sample Size		1		41	4	173	27			218		1	465
Kasilof River													
Sample period: 12 June-5 August													
Escapement		527		24,484	526	44,757	42,124			37,911			150,329
Percent		0.35		16.29	0.35	29.77	28.02			25.22			100.00
Sample Size		2		93	2	170	160			144			571
Packers Creek													
Sample period: 20 June-31 July													
Escapement		994		110	6,738	10,052	22,975						40,869
Percent		2.43		0.27	16.49	24.60	56.22						100.00
Sample Size		9		1	61	91	208						370
Fish Creek													
Sample period: 8 July-20 August													
Escapement		887		65,902	591	28,666	16,845			4,728			117,619
Percent		0.75		56.03	0.50	24.37	14.32			4.02			100.00
Sample Size		3		223	2	97	57			16			398
Kenai River													
Sample period: 1 July-13 August													
Escapement	390	2,338	2,338	99,365	51,046	248,216	52,214	390	21,431	335,109	390	390	813,617
Percent	0.05	0.29	0.29	12.21	6.27	30.51	6.42	0.05	2.63	41.19	0.05	0.05	100.00
Sample Size	1	6	6	255	131	637	134	1	55	860	1	1	2,088

Appendix A.29. Estimated age composition of Sitkalidak Section sockeye salmon catch by week, July, 1993^a.

Week	Sample Size		Ages											Total	
			0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4		3.3
28 (7/01-7/11)	499	Percent Numbers	0.6 389	0.0 0	3.5 2,336	9.7 6,426	0.0 12	17.9 11,814	16.8 11,123	0.6 389	47.9 31,673	0.6 406	0.0 18	2.3 1,507	100.0 66,093
29 (7/12-7/18)	1,078	Percent Numbers	0.5 123	0.0 0	4.5 1,136	16.7 4,218	0.2 39	21.4 5,403	17.0 4,301	0.5 119	36.6 9,237	1.1 268	0.3 75	1.3 327	100.0 25,245
30 (7/19-7/25)	507	Percent Numbers	0.8 186	0.0 2	3.7 918	11.3 2,780	0.1 17	19.7 4,832	19.7 4,835	0.4 100	37.3 9,137	4.4 1,088	0.7 169	1.8 444	100.0 24,508
31 (7/26-7/31)	557	Percent Numbers	3.6 316	0.2 15	7.4 659	14.6 1,294	0.8 74	15.7 1,391	24.8 2,196	0.5 47	24.8 2,196	6.7 592	0.0 4	0.8 71	100.0 8,855
Total	2,641	Percent Numbers	0.8 1,014	0.0 17	4.0 5,049	11.8 14,718	0.1 142	18.8 23,440	18.0 22,455	0.5 655	41.9 52,243	1.9 2,354	0.2 266	1.9 2,349	100.0 124,701

^a Percent age composition was derived using catch numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When a catch occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

Appendix A.30. Estimated age composition of Katmai and Alinchak Sections sockeye salmon catch by week, July, 1993^a.

Week	Sample Size		Ages											Total
			0.2	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	
28 (7/01-7/11)	0	Percent Numbers	0.4 32	3.3 272	5.6 465	0.4 32	24.5 2,051	11.1 929	2.9 240	49.6 4,150	1.1 96	0.4 32	0.8 64	100.0 8,365
29 (7/12-7/18)	0	Percent Numbers	0.4 32	3.3 269	5.6 458	0.4 32	24.5 2,023	11.1 917	2.9 237	49.6 4,094	1.1 95	0.4 32	0.8 63	100.0 8,252
30 (7/19-7/25)	522	Percent Numbers	0.4 6	3.3 55	5.6 93	0.4 6	24.5 410	11.1 186	2.9 48	49.6 831	1.1 19	0.4 6	0.8 13	100.0 1,674
31 (7/26-7/31)	0	Percent Numbers	0.4 10	3.3 87	5.6 148	0.4 10	24.5 653	11.1 296	2.9 77	49.6 1,322	1.1 31	0.4 10	0.8 20	100.0 2,664
Total	522	Percent Numbers	0.4 80	3.3 683	5.6 1,164	0.4 80	24.5 5,137	11.1 2,328	2.9 602	49.6 10,397	1.2 241	0.4 80	0.8 160	100.0 20,955

^a Percent age composition was derived using catch numbers after rounding. These numbers were calculated by age and day using linear interpolation between weekly sampling events. When a catch occurs prior to the first sample or after the last sample, calculations are based on the adjacent sample.

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